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Final Report  
Phase I RCRA Facility Investigation  
for Appendix I Sites

VOLUME II-B

SWMU-14, Sludge Drying Beds



Department of the Air Force  
Oklahoma City Air Logistics Center  
Tinker Air Force Base, Oklahoma

September 1994

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RFI REPORT**

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## **List of Acronyms**

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AFB	Air Force Base
AOC	areas of concern
°C	degrees centigrade
CAL	Corrective Action Levels
CDM	CDM Federal Programs Corporation
CEC	cation exchange capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm/s	centimeters per second
COD	chemical oxygen demand
CMS	Corrective Measures Study
DCQAP	Data Collection Quality Assurance Plan
DERP	Defense Environmental Response Program
DOD	U.S. Department of Defense
DQO	Data Quality Objective
DWS	drinking water standards
EC	electric conductivity
ECD	ethylene chloride
EID	Engineering Installation Division
EPA	U.S. Environmental Protection Agency
ES	Engineering Science
FID	flame ionization detectors
ft/ft	foot per foot
FTMA	Fuel Truck Maintenance Area
GC/MS	gas chromatograph/mass spectrometry
HCl	hydrochloric acid
HRS	Hazardous Ranking System
HSWA	Hazardous and Solid Waste Amendments
I.D.	inside diameter
IRP	Installation Restoration Program
IWP-1	Industrial Waste Pit No. 1
IWTP	industrial wastewater treatment plant
JP-4	jet propulsion fuel grade 4
LSZ	lower saturated zone

## **List of Acronyms** (Continued)

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µg/kg	micrograms per kilogram
µg/L	micrograms per liter
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O.D.	outside diameter
PA/SI	preliminary assessment/site investigation
PCE	tetrachloroethene
PID	photoionization detectors
PVC	polyvinyl chloride
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision
RPD	relative percent difference
SARA	Superfund Amendments and Reauthorization Act
SDB	Sludge Drying Beds
SP	self potential
SVOC	semivolatile organic compound
SWMU	solid waste management unit
TCA	trichloroethane
TCE	trichloroethene
TPH	total petroleum hydrocarbons
TSD	treatment, storage, and disposal (facility)
TOC	total organic carbon
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers

**List of Acronyms** (Continued)

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USC	U.S. Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USZ	upper saturated zone
VOA	volatile organic analysis
VOC	volatile organic compounds
WQS	Water Quality Standards

**APPENDIX D  
(CONTINUED)  
DATA TABLES, CERTIFICATES OF ANALYSIS,  
CHAIN-OF-CUSTODY**

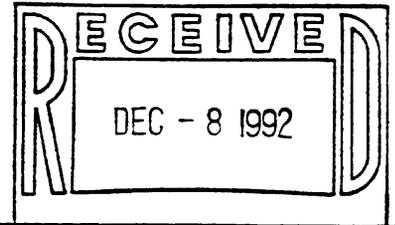
TJT

Routed to KFC/CTL 12/9/92



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

# ANALYTICAL SERVICES



## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/07/93

Work Order: B3-10-336

This is the Certificate of Analysis for the following samples:

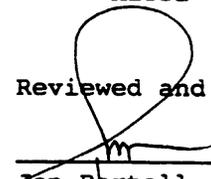
Client Work ID: D.O.5001	409832-003-01
Date Received: 10/26/93	
Number of Samples: 21	
Sample Type: SOIL	

### I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1041	B3-10-336-01
A1042	B3-10-336-02
A1043	B3-10-336-03
A1044	B3-10-336-04
A1045	B3-10-336-05
A1046	B3-10-336-06
A1047	B3-10-336-07
A1047-MS	B3-10-336-08
A1047-MSD	B3-10-336-09
A1048	B3-10-336-10
A1049	B3-10-336-11
A1050	B3-10-336-12
A1051	B3-10-336-13

Reviewed and Approved:

  
 \_\_\_\_\_  
 Jon Bartell  
 Laboratory Director

American Council of Independent Laboratories  
 International Association of Environmental Testing Laboratories  
 American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1052	B3-10-336-14
A1053	B3-10-336-15
A1054	B3-10-336-16
A1055	B3-10-336-17
J5420	B3-10-336-18
LAB BLANK #1	B3-10-336-19
LAB BLANK #1	B3-10-336-20
LAB BLANK 2	B3-10-336-21

II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-336  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1041  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	94	88 - 110
BROMOFLUOROBENZENE	100	86 - 115
1,2-DICHLOROETHANE-D4	103	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1042  
SAMPLE DATE: 10/25/93 11:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.23	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1042  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	2.5	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.9	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1042  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
1-Methylphenol		0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene		0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
					Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABM HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1042  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	91	30 - 115
Terphenyl-D14	79	18 - 137
Phenol-D5	77	24 - 113
2-Fluorophenol	68	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1042**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **107.526**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.0	N	0.88	7060	11/12/93
Aluminum	11000	N	22	6010	11/13/93
Barium	110	N*	22	6010	11/13/93
Beryllium	1.3		0.54	6010	11/13/93
Cadmium	0.51		0.54	6010	11/13/93
Chromium	11		1.1	6010	11/13/93
Copper	5.9		2.7	6010	11/13/93
Iron	8600	N*	11	6010	11/13/93
Nickel	9.0		4.3	6010	11/13/93
Lead	3.4	N	0.26	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.15		1.1	6010	11/13/93
Zinc	17		2.2	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1043  
SAMPLE DATE: 10/25/93 11:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.34	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1043  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.6	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.9	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	5.7	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	107	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1043  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting				Reportin		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1043  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	58	23 - 120
2-Fluorobiphenyl	70	30 - 115
Terphenyl-D14	60	18 - 137
Phenol-D5	55	24 - 113
2-Fluorophenol	46	25 - 121
2,4,6-Tribromophenol	57	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1043**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **83.3333**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.1	N	1.2	7060	11/12/93
Aluminum	7000	N	17	6010	11/13/93
Barium	56	N*	17	6010	11/13/93
Beryllium	1.2		0.42	6010	11/13/93
Cadmium	0.80		0.42	6010	11/13/93
Chromium	9.7		0.83	6010	11/13/93
Copper	4.6		2.1	6010	11/13/93
Iron	8200	N*	8.3	6010	11/13/93
Nickel	11		3.3	6010	11/13/93
Lead	4.4	N	0.35	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.24		0.83	6010	11/13/93
Zinc	14		1.7	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1044  
SAMPLE DATE: 10/25/93 11:25:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1044  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	4.6	J	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.8	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.7	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	92	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1044  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1044  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	91	30 - 115
Terphenyl-D14	80	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	60	25 - 121
2,4,6-Tribromophenol	82	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1044**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **94.3396**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.2	N	1.1	7060	11/12/93
Aluminum	9800	N	19	6010	11/13/93
Barium	270	N*	19	6010	11/13/93
Beryllium	1.9		0.47	6010	11/13/93
Cadmium	0.92		0.47	6010	11/13/93
Chromium	15		0.94	6010	11/13/93
Copper	8.6		2.4	6010	11/13/93
Iron	14000	N*	9.4	6010	11/13/93
Nickel	16		3.8	6010	11/13/93
Lead	4.5	N	0.33	7421	11/12/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	0.20		0.94	6010	11/13/93
Zinc	20		1.9	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1045  
SAMPLE DATE: 10/25/93 11:35:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.13	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-336  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1045  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	8.5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	13	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	2.6	J	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	4.1	J	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	7.5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	111	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: AEM HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1045  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporti	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
3(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
4-Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1045**  
SAMPLE DATE: **10/25/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	90	30 - 115
Terphenyl-D14	76	18 - 137
Phenol-D5	72	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	72	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1045**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **94.3396**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.8	N	1.0	7060	11/12/93
Aluminum	8800	N	19	6010	11/13/93
Barium	410	N*	19	6010	11/13/93
Beryllium	1.6		0.47	6010	11/13/93
Cadmium	0.68		0.47	6010	11/13/93
Chromium	13		0.94	6010	11/13/93
Copper	7.9		2.4	6010	11/13/93
Iron	12000	N*	9.4	6010	11/13/93
Nickel	14		3.8	6010	11/13/93
Lead	6.6	N	0.31	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.098		0.94	6010	11/13/93
Zinc	18		1.9	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1046  
SAMPLE DATE: 10/25/93 14:15:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.11	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1046  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.0	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	120	B	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	5.6	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

**Data Qualifier Key:**  
 U - none detected  
 J - estimated value (less than the sample quantitation limit)  
 B - analyte is found in the associated blank as well as in the sample  
 'blank' - positive result  
 \* - Surrogate recovery is outside QC limit  
 D - compound identified at a secondary dilution factor  
 E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-10-336

TEST NAME: **ABM HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1046**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol		0.330	U	0.350	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
ethylphenol		0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene		0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
					Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1046**  
SAMPLE DATE: **10/25/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	89	30 - 115
Terphenyl-D14	83	18 - 137
Phenol-D5	65	24 - 113
2-Fluorophenol	55	25 - 121
2,4,6-Tribromophenol	92	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
METHOD REFERENCE: EPA6010

SAMPLE ID: A1046  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL  
DILUTION FACTOR (6010): 105.263  
UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	0.94	7060	11/12/93
Aluminum	13000	N	21	6010	11/13/93
Barium	400	N*	21	6010	11/13/93
Beryllium	2.4		0.53	6010	11/13/93
Cadmium	1.00		0.53	6010	11/13/93
Chromium	12		1.1	6010	11/13/93
Copper	8.3		2.6	6010	11/13/93
Iron	16000	N*	11	6010	11/13/93
Nickel	13		4.2	6010	11/13/93
Lead	4.7	N	0.28	7421	11/12/93
Mercury	0.027		0.022	7471	11/07/93
Silver	0.50		1.1	6010	11/13/93
Zinc	18		2.1	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1047  
SAMPLE DATE: 10/25/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.26	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1047  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.0	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	130	B	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	8.5	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	111	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1047**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**

UNITS:	MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: **ARM HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1047**  
SAMPLE DATE: **10/25/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	67	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	78	18 - 137
Phenol-D5	72	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	74	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-336  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1047**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **101.010**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.2	N	0.86	7060	11/12/93
Aluminum	10000	N	20	6010	11/13/93
Barium	760	N*	20	6010	11/13/93
Beryllium	1.3		0.51	6010	11/13/93
Cadmium	1.3		0.51	6010	11/13/93
Chromium	14		1.0	6010	11/13/93
Copper	6.8		2.5	6010	11/13/93
Iron	12000	N*	10	6010	11/13/93
Nickel	16		4.0	6010	11/13/93
Lead	6.1	N	0.26	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.11		1.0	6010	11/13/93
Zinc	18		2.0	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1047-MS  
SAMPLE DATE: 10/25/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		93	% REC	11/05/93	EPA7196

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1047-MS  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/05/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	90	Trichloroethene	85
		Benzene	96
		Toluene	103
		Chlorobenzene	103

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	111	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1047-MS  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: % REC

	Result		Result
Phenol	79	Acenaphthene	121
2-Chlorophenol	90	4-Nitrophenol	67
1,4-Dichlorobenzene	75	2,4-Dinitrotoluene	84
N-Nitroso-di-n-propylamine	99	Pentachlorophenol	74
1,2,4-Trichlorobenzene	89	Pyrene	96
4-Chloro-3-methylphenol	89		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	79	23 - 120
2-Fluorobiphenyl	92	30 - 115
Terphenyl-D14	77	18 - 137
Phenol-D5	72	24 - 113
2-Fluorophenol	70	25 - 121
2,4,6-Tribromophenol	82	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1047-MS  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 101.010  
 UNITS: % REC

	Result	Method Reference	Analysis Date
Arsenic	23.8	7060	11/12/93
Aluminum	1134	6010	11/13/93
Barium	0	6010	11/13/93
Beryllium	83	6010	11/13/93
Cadmium	86	6010	11/13/93
Chromium	92	6010	11/13/93
Copper	92	6010	11/13/93
Iron	896	6010	11/13/93
Nickel	86	6010	11/13/93
Lead	3.4	7421	11/12/93
Mercury	109	7471	11/07/93
Silver	86	6010	11/13/93
Zinc	86	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Referenced notes for these results:

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs, affecting all soil samples in batch. LCS / LCSD results and method Quality Control were acceptable.

Duplicate analysis outside control limits due to matrix interference on barium and iron analysis by ICPEs, affecting all soil samples in batch. LCS/LCSD results & method QC were acceptable.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01      Work Order: B3-10-336

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SAMPLE ID: A1047-MSD  
SAMPLE DATE: 10/25/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		96	% REC	11/05/93	EPA7196

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1047-MSD  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/05/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	99	Trichloroethene	89
		Benzene	102
		Toluene	110
		Chlorobenzene	108

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	110	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **ARM HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1047-MSD**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/13/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **% REC**

	Result		Result
Phenol	73	Acenaphthene	112
2-Chlorophenol	78	4-Nitrophenol	62
1,4-Dichlorobenzene	67	2,4-Dinitrotoluene	74
N-Nitroso-di-n-propylamine	86	Pentachlorophenol	62
1,2,4-Trichlorobenzene	83	Pyrene	89
4-Chloro-3-methylphenol	81		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	91	30 - 115
Terphenyl-D14	73	18 - 137
Phenol-D5	67	24 - 113
2-Fluorophenol	63	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1047-MSD**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **113.636**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	44.7	7060	11/12/93
Aluminum	1090	6010	11/13/93
Barium	0	6010	11/13/93
Beryllium	84	6010	11/13/93
Cadmium	87	6010	11/13/93
Chromium	92	6010	11/13/93
Copper	93	6010	11/13/93
Iron	833	6010	11/13/93
Nickel	87	6010	11/13/93
Lead	0	7421	11/12/93
Mercury	104	7471	11/07/93
Silver	87	6010	11/13/93
Zinc	87	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPES, affecting all soil samples in batch. LCS / LCSD results and method Quality Control were acceptable.

Duplicate analysis outside control limits due to matrix interference on barium and iron analysis by ICPES, affecting all soil samples in batch. LCS/LCSD results & method QC were acceptable.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1048  
SAMPLE DATE: 10/25/93 14:30:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1048  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.4	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	13	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.0	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: AEM HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1048  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: AEW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1048  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	69	23 - 120
2-Fluorobiphenyl	84	30 - 115
Terphenyl-D14	73	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	72	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1048  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 117.647  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.8	N	1.1	7060	11/12/93
Aluminum	7400	N	24	6010	11/13/93
Barium	390	N*	24	6010	11/13/93
Beryllium	1.2		0.59	6010	11/13/93
Cadmium	0.46		0.59	6010	11/13/93
Chromium	11		1.2	6010	11/13/93
Copper	6.0		2.9	6010	11/13/93
Iron	8000	N*	12	6010	11/13/93
Nickel	9.3		4.7	6010	11/13/93
Lead	4.6	N	0.34	7421	11/12/93
Mercury	0.020	U	0.020	7471	11/07/93
Silver	0.023		1.2	6010	11/13/93
Zinc	15		2.4	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1049  
SAMPLE DATE: 10/25/93 14:40:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1049  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.4	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	110	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1049**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/13/93**  
 DILUTION FACTOR: **0.033**

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
bis(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
4-Methylphenol		0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene		0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
					Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1049  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	72	23 - 120
2-Fluorobiphenyl	86	30 - 115
Terphenyl-D14	74	18 - 137
Phenol-D5	67	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	75	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1049**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **103.092**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.3	N	0.86	7060	11/12/93
Aluminum	9500	N	21	6010	11/13/93
Barium	690	N*	21	6010	11/13/93
Beryllium	1.6		0.52	6010	11/13/93
Cadmium	0.26		0.52	6010	11/13/93
Chromium	13		1.0	6010	11/13/93
Copper	7.9		2.6	6010	11/13/93
Iron	12000	N*	10	6010	11/13/93
Nickel	11		4.1	6010	11/13/93
Lead	8.5	N	1.0	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.26		1.0	6010	11/13/93
Zinc	15		2.1	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1050  
SAMPLE DATE: 10/25/93 15:50:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1050  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.5	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.2	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: AEW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1050  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
2-Ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1050  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	60	23 - 120
2-Fluorobiphenyl	78	30 - 115
Terphenyl-D14	63	18 - 137
Phenol-D5	62	24 - 113
2-Fluorophenol	53	25 - 121
2,4,6-Tribromophenol	60	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1050  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 97.0873  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.3	N	0.86	7060	11/12/93
Aluminum	15000	N	19	6010	11/13/93
Barium	230	N*	19	6010	11/13/93
Beryllium	1.8		0.49	6010	11/13/93
Cadmium	0.98		0.49	6010	11/13/93
Chromium	14		0.97	6010	11/13/93
Copper	7.8		2.4	6010	11/13/93
Iron	12000	N*	9.7	6010	11/13/93
Nickel	11		3.9	6010	11/13/93
Lead	9.2	N	1.0	7421	11/12/93
Mercury	0.024	U	0.024	7471	11/07/93
Silver	0.079		0.97	6010	11/13/93
Zinc	21		1.9	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1051  
SAMPLE DATE: 10/25/93 16:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50	MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1051  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.7	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-10-336

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EP8270**

SAMPLE ID: **A1051**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/13/93**  
 DILUTION FACTOR: **0.033**

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl) ether		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
(2-Chloroisopropyl) ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
ethylphenol		0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene		0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
					Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1051  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	79	23 - 120
2-Fluorobiphenyl	91	30 - 115
Terphenyl-D14	75	18 - 137
Phenol-D5	72	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	78	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1051**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **104.166**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	11	N	3.5	7060	11/12/93
Aluminum	8700	N	21	6010	11/13/93
Barium	580	N*	21	6010	11/13/93
Beryllium	1.9		0.52	6010	11/13/93
Cadmium	0.94		0.52	6010	11/13/93
Chromium	10		1.0	6010	11/13/93
Copper	11		2.6	6010	11/13/93
Iron	12000	N*	10	6010	11/13/93
Nickel	28		4.2	6010	11/13/93
Lead	27	N	1.0	7421	11/12/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.69		1.0	6010	11/13/93
Zinc	18		2.1	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01      Work Order: B3-10-336

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SAMPLE ID: A1052  
SAMPLE DATE: 10/25/93 16:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1052  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	93	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1052  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **KPA8270**

SAMPLE ID: **A1052**  
SAMPLE DATE: **10/25/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	89	30 - 115
Terphenyl-D14	73	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1052  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 89.2857  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.6	N	1.1	7060	11/12/93
Aluminum	9000	N	18	6010	11/13/93
Barium	150	N*	18	6010	11/13/93
Beryllium	1.5		0.45	6010	11/13/93
Cadmium	0.79		0.45	6010	11/13/93
Chromium	11		0.89	6010	11/13/93
Copper	8.0		2.2	6010	11/13/93
Iron	9400	N*	8.9	6010	11/13/93
Nickel	12		3.6	6010	11/13/93
Lead	4.6	N	0.32	7421	11/12/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	0.28		0.89	6010	11/13/93
Zinc	19		1.8	6010	11/13/93

Data qualifier key:  
 E - estimated value  
 M - duplicate injection precision not met  
 N - spike recovery not within control limits  
 S - determined by MSA  
 W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance  
 \* - duplicate analysis outside control limits  
 + - Correlation coefficient for the MSA <0.995  
 B - < CRDL but >= IDL  
 U - none detected  
 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: A1053  
SAMPLE DATE: 10/25/93 16:25:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50	MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1053  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.3	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.2	BJ	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: AEM HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1053  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporti	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
1-Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: AEM HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1053  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	67	23 - 120
2-Fluorobiphenyl	85	30 - 115
Terphenyl-D14	70	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	64	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1053  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 106.382  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	5.0	N	3.7	7060	11/15/93
Aluminum	9100	N	21	6010	11/13/93
Barium	760	N*	21	6010	11/13/93
Beryllium	1.6		0.53	6010	11/13/93
Cadmium	0.45		0.53	6010	11/13/93
Chromium	13		1.1	6010	11/13/93
Copper	8.0		2.7	6010	11/13/93
Iron	11000	N*	11	6010	11/13/93
Nickel	12		4.3	6010	11/13/93
Lead	8.9	N	1.1	7421	11/12/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	0.32		1.1	6010	11/13/93
Zinc	16		2.1	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: A1054  
SAMPLE DATE: 10/25/93 16:25:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/05/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: E3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPAS240

SAMPLE ID: A1054  
 SAMPLE DATE: 10/25/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.8	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.4	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	113	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1054**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/01/93**  
 ANALYSIS DATE: **11/13/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **MG/KG**

	Reporting			Reportin		
	Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1054**  
SAMPLE DATE: **10/25/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	70	23 - 120
2-Fluorobiphenyl	81	30 - 115
Terphenyl-D14	65	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	62	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1054**  
 SAMPLE DATE: **10/25/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **97.0873**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.87	UN	0.87	7060	11/12/93
Aluminum	8300	N	19	6010	11/13/93
Barium	530	N*	19	6010	11/13/93
Beryllium	1.6		0.49	6010	11/13/93
Cadmium	0.10		0.49	6010	11/13/93
Chromium	12		0.97	6010	11/13/93
Copper	8.4		2.4	6010	11/13/93
Iron	10000	N*	9.7	6010	11/13/93
Nickel	13		3.9	6010	11/13/93
Lead	8.8	N	1.0	7421	11/12/93
Mercury	0.020	U	0.020	7471	11/07/93
Silver	0.14		0.97	6010	11/13/93
Zinc	15		1.9	6010	11/13/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1055  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	95	88 - 110
BROMOFLUOROBENZENE	104	86 - 115
1,2-DICHLOROETHANE-D4	108	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Page: 78 of 90

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

---

TEST NAME: Grain Size Distriubtion  
METHOD REFERENCE: ASTM\_D422

SAMPLE ID: J5420  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Form not available.

Page: 79 of 90

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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TEST NAME: Moisture Content  
METHOD REFERENCE: ASTM\_D216

SAMPLE ID: J5420  
SAMPLE DATE: 10/25/93  
SAMPLE MATRIX: SOIL

Form not available.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

SAMPLE ID: LAB BLANK #1  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-336  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-10-336

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/01/93  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
bis(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
1,4-Dimethylphenol		0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene		0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
					Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

TEST NAME: AEM HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK #1  
SAMPLE DATE: not spec  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	82	23 - 120
2-Fluorobiphenyl	99	30 - 115
Terphenyl-D14	82	18 - 137
Phenol-D5	72	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	83	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	11/13/93
Barium	0.20	U	0.20	6010	11/13/93
Beryllium	0.0050	U	0.0050	6010	11/13/93
Cadmium	0.0050	U	0.0050	6010	11/13/93
Chromium	0.010	U	0.010	6010	11/13/93
Copper	0.025	U	0.025	6010	11/13/93
Iron	0.10	U	0.10	6010	11/13/93
Nickel	0.040	U	0.040	6010	11/13/93
Lead	0.0030	U	0.0030	7421	11/12/93
Mercury	0.00020	U	0.00020	7471	11/07/93
Silver	0.010	U	0.010	6010	11/13/93
Zinc	0.020	U	0.020	6010	11/13/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/07/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-336

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE:  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.2	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.1	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	95	88 - 110
BROMOFLUOROBENZENE	101	86 - 115
1,2-DICHLOROETHANE-D4	105	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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SAMPLE ID: LAB BLANK 2  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010 MG/KG	11/05/93	EPA7196

Page: 87 of 90

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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Referenced notes for this work order:

B310336 18A J5420

GEOTECHNICAL DATA REPORTED UNDER SEPARATE COVER.

B310336 18B J5420

GEOTECHNICAL DATA REPORTED UNDER SEPARATE COVER.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME Hazardous Substance Vols.

TEST CODE 8240TK

Hazardous Substance  
List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME ABN HSL GC/MS Extractables

TEST CODE 8270TK

Hazardous Substance  
List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME Arsenic - Graphite Furnace

TEST CODE AS\_GF

Arsenic  
Graphite  
Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME Cation Exchange Capacity

TEST CODE CEC\_A

Cation exchange  
Capacity

Part 2: Chemical and microbiological properties method 57-3. American Society of Agronomy, Methods of soil Analysis 2nd Edition.

TEST NAME Chromium VI

TEST CODE CR\_VI

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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TEST NAME Grain Size Distriubtion TEST CODE GRAIN

Method not available.

TEST NAME Mercury TEST CODE HG\_AA

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Method 245.5-"Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME Metals TEST CODE ICPTK2

Method not available.

TEST NAME Moisture Content TEST CODE MOIS\_G

Method not available.

TEST NAME Lead - Graphite Furnace TEST CODE PB\_GF

Lead

Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME Vertical Permeability TEST CODE V\_PERM

Method not available.

Company: IT CORPORATION  
Date: 12/07/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-336

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TEST NAME **GFAA Digestion - Soil** TEST CODE **Z3050F**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace/Flame AA analysis.

TEST NAME **ICPES Digestion - Soil** TEST CODE **Z3050P**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for ICPES analysis. Equivalent to Method 3050A, SW-846 Update I, July 1992.



# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document N° 313510  
Page 1 of 3

White: To accompany samples Yellow: Field copy \*See back of form for special instructions

Project Name/No. Trinker AFB 15001 Samples Shipment Date 7 10-25-93 Bill to: 5 409832-03.01

Sample Team Members Andrew Gordon Lab Destination ITAS - Austin O.O. SD01

Profit Center No. 3 3527 Lab Contact Karner Dearye

Project Manager Timmy Taylor Project Contact/Phone Don McGrayer 705-736-8260

Purchase Order No. 6 409832.03.01 5001 Carrier/Waybill No. 13 8460756415

Report to: Tim Jennings IT-Austin-ES

## ONE CONTAINER PER LINE

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1041	Trip Blank	10-27-93 1700	Glass Clear	40ml	HEX CDX	8240	60042 OK 10/26/93	93244102 10/15/93 1700h2
A1042	Soil	10-25-93 1110		125ml	COOL	8240		
A1042		10-25-93 1110		500ml		8270, 600/700		
A1043		10-25-93 1120		125ml		8240		
A1043		10-25-93 1120		500ml		5708270, 600/700		
A1044		10-25-93 1125		125ml		8240		
A1044		10-25-93 1125		500ml		8270, 600, 700		

Special Instructions: 23

Possible Hazard Identification: 24  
 Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Turnaround Time Required: 26  
 Normal  Rush

QC Level: 27  
 I  II  III

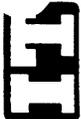
Sample Disposal: 25  
 Return to Client  Disposal by Lab  Archive (mos.)

1. Relinquished by [Signature] Date: 10-25-93 Time: 1800  
 (Signature/Affiliation)

2. Relinquished by [Signature] Date: 10-26-93 Time: 0922  
 (Signature/Affiliation)

3. Relinquished by [Signature] Date: 10-26-93 Time: 0922  
 (Signature/Affiliation)

Comments: 29



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

**ANALYSIS R. JEST AND  
CHAIN OF CUSTODY RECORD (cont.)\***

6310336  
Reference Document No. 313510  
Page 2 of 3

Project Name TAFB-5001

Project No. 40832.0301

Samples Shipment Date 10-25-93

White: To accompany samples

Yellow: Field copy

\*See back of form for special instructions.

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time 14 Collected	Container 17 Type	Sample 18 Volume	Pre-19 preservative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
A1045	Soil	10-25-93 1135	WAF	600ml	COOL	8240	Good, 100% WAF 12/26/93	
A1045		10-25-93 1135	500	500ml		8270, 600/700		
A1046		10-25-93 1415	125	125ml		8240		
A1046		10-25-93 1415	500	500ml		8270, 600/700		
A1047 MSB		10-25-93 1420	125	125ml		8240		
A1047 MSB		10-25-93 1420	500	500ml		8270, 600/700		
A1048		10-25-93 1431	125	125ml		8240		
A1048		10-25-93 1430	500	500ml		8270, 600/700		
A1049		10-25-93 1440	125	125ml		8240		
A1049		10-25-93 1440	500	500ml		8270, 600/700		
A1050		10-25-93 1550	clear glass	125ml		8240		
A1050		10-25-93 1550		500ml		8270, 600/700		
A1051		10-25-93 1600		125ml		8240		
A1051		10-25-93 1600		500ml		8270, 600/700		
A1052		10-25-93 1605		125ml		8240		
A1052		10-25-93 1605		500ml		8270, 600/700		
A1053		10-25-93 1625		125ml		8240		
A1053		10-25-93 1625		500ml		8270, 600/700		
A1054		10-25-93 1625		125ml		8240		
A1054		10-25-93 1625		500ml		8270, 600/700		



Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1042

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	87.7
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	110
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	87.7

## Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1043

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
<hr/>						
03B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	116
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	109
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	116

## Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1044

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	111
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	115
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	111

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1045

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	103
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	111
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	103

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1046

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
06B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	94.3
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	108
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	94.3

## Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1047

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	85.5
	Chromium VI	B310336-19B	1104CR_VI	11/04/93	11/04/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	112
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	85.5

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1047-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	103
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	120
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	103

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1047-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
09B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	104
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	115
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	104

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1048

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B						
	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	112
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	100
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	112

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1049

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
11B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	86.2
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	112
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	345

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1050

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
12B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	85.5
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	10.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	119
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	342

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1051

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
13B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	348
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	108
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	348

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1052

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
14B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	106
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	114
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	106

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1053

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
15B	Arsenic	B310336-19B	11103050F1	11/10/93	11/16/93	367
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	115
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	367

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : A1054

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
16B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	87
	Chromium VI	B310336-21A	1105CR_VI1	11/05/93	11/05/93	50.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	101
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	348

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : LAB BLANK #1

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
19B	Arsenic	B310336-19B	11103050F1	11/10/93	11/12/93	1.0
	Chromium VI	B310336-19B	1104CR_VI1	11/04/93	11/04/93	1.0
	Mercury	B310336-19B	1107HGAA1	11/07/93	11/07/93	1.0
	Lead	B310336-19B	11103050F1	11/10/93	11/12/93	1.0

Auxiliary Data Summary

12/03/93

Work order : B310336

Sample ID : LAB BLANK 2

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
	21A Chromium VI	B310339-21A	1105CR_VI1	11/05/93	11/05/93	1.0

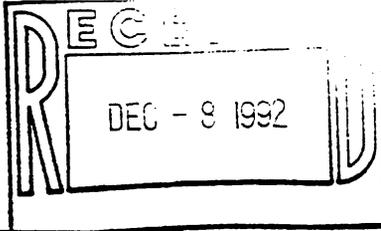


TFJ

Routed to K4.CF.TL 12/03



# ANALYTICAL SERVICES



## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/06/93

Work Order: B3-10-300

This is the Certificate of Analysis for the following samples:

Client Work ID: D.O.5001	409832-003-01
Date Received: 10/22/93	
Number of Samples: 25	
Sample Type: WATER/SOIL	

### I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1013	B3-10-300-01
A1014	B3-10-300-02
A1015	B3-10-300-03
A1016	B3-10-300-04
A1017	B3-10-300-05
A1018	B3-10-300-06
A1019	B3-10-300-07
A1019-MS	B3-10-300-08
A1019-MSD	B3-10-300-09
A1020	B3-10-300-10
A1021	B3-10-300-11
A1500	B3-10-300-12
A1501	B3-10-300-13

Reviewed and Approved:

  
 \_\_\_\_\_  
 Jon Bartell  
 Laboratory Director

American Council of Independent Laboratories  
 International Association of Environmental Testing Laboratories  
 American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1502	B3-10-300-14
A1503	B3-10-300-15
A1504	B3-10-300-16
A1505	B3-10-300-17
A1506	B3-10-300-18
A1507	B3-10-300-19
A1508	B3-10-300-20
LAB BLANK #1	B3-10-300-21
LAB BLANK #2	B3-10-300-22
LAB BLANK #3	B3-10-300-23
LAB BLANK	B3-10-300-24
LAB BLANK #2	B3-10-300-25

## II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

## III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1013  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	94	88 - 110
BROMOFLUOROBENZENE	95	86 - 115
1,2-DICHLOROETHANE-D4	102	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

**Referenced notes for these results:**

Sample was run by Method 624. A nonconformance was filed.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

SAMPLE ID: A1014  
SAMPLE DATE: 10/21/93 08:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 WORK Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1014  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.1	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.1	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	111	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1014**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/29/93**  
 ANALYSIS DATE: **11/02/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **MG/KG**

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.066	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1014  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	78	30 - 115
Terphenyl-D14	85	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	68	25 - 121
2,4,6-Tribromophenol	74	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1014**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **113.636**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.4	N	1.0	7060	11/09/93
Aluminum	8600	N*	23	6010	11/23/93
Barium	98	N*	23	6010	11/23/93
Beryllium	0.87		0.57	6010	11/23/93
Cadmium	0.57	U	0.57	6010	11/23/93
Chromium	12		1.1	6010	11/23/93
Copper	7.1		2.8	6010	11/23/93
Iron	11000	N*	11	6010	11/23/93
Nickel	12	N	4.5	6010	11/23/93
Lead	5.3	N	0.30	7421	11/09/93
Mercury	0.020	U	0.020	7471	11/06/93
Silver	1.1	U	1.1	6010	11/23/93
Zinc	19		2.3	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1015  
SAMPLE DATE: 10/21/93 08:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1015  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	6.9	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.4	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
trans-1,2-Dichloroethene	5	U	5	Bromoform	5	U	5
cis-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
Chloroform	5	U	5	4-Methyl-2-pentanone	50	U	50
1,2-Dichloroethane	5	U	5	Tetrachloroethene	5	U	5
2-Butanone	4.6	JB	100	1,1,2,2-Tetrachloroethane	5	U	5
1,1,1-Trichloroethane	5	U	5	Toluene	5	U	5
Carbon tetrachloride	5	U	5	Chlorobenzene	5	U	5
Vinyl acetate	10	U	10	Ethylbenzene	5	U	5
Dichlorobromomethane	5	U	5	Styrene	5	U	5
				Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1015  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
4-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.12	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1015  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	75	23 - 120
2-Fluorobiphenyl	80	30 - 115
Terphenyl-D14	87	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	64	25 - 121
2,4,6-Tribromophenol	73	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1015**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **95.2380**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.97	UN	0.97	7060	11/09/93
Aluminum	9500	N*	19	6010	11/23/93
Barium	430	N*	19	6010	11/23/93
Beryllium	0.87		0.48	6010	11/23/93
Cadmium	0.48	U	0.48	6010	11/23/93
Chromium	13		0.95	6010	11/23/93
Copper	6.7		2.4	6010	11/23/93
Iron	10000	N*	9.5	6010	11/23/93
Nickel	12	N	3.8	6010	11/23/93
Lead	5.9	N	0.29	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/06/93
Silver	0.95	U	0.95	6010	11/23/93
Zinc	18		1.9	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1016  
SAMPLE DATE: 10/21/93 08:25:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1016  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	6.9	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.6	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.8	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	107	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1016  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
2-(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
3-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.088	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1016  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	71	23 - 120
2-Fluorobiphenyl	80	30 - 115
Terphenyl-D14	84	18 - 137
Phenol-D5	61	24 - 113
2-Fluorophenol	51	25 - 121
2,4,6-Tribromophenol	92	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1016**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **116.279**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.97	UN	0.97	7060	11/09/93
Aluminum	6200	N*	23	6010	11/23/93
Barium	850	N*	23	6010	11/23/93
Beryllium	0.61		0.58	6010	11/23/93
Cadmium	0.58	U	0.58	6010	11/23/93
Chromium	9.8		1.2	6010	11/23/93
Copper	5.3		2.9	6010	11/23/93
Iron	9200	N*	12	6010	11/23/93
Nickel	10	N	4.7	6010	11/23/93
Lead	6.0	N	0.29	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/06/93
Silver	1.2	U	1.2	6010	11/23/93
Zinc	12		2.3	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1017  
SAMPLE DATE: 10/21/93 14:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1017  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	7.0	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.9	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	3.7	J	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	13	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	2.3	J	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	102	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1017  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG		Reporting			Reporting	
	Result	Qual	Limit			Result	Qual
Phenol	0.330	U	0.330		2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330		3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330		Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330		2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330		4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330		Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330		2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330		Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether	0.330	U	0.330		4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol	0.330	U	0.330		Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330		4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330		4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330		N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330		4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330		Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330		Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330		Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330		Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330		Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330		Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330		Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330		Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330		3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330		Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330		Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330		bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330		Di-n-octylphthalate	0.27	JB 0.330
2,4,5-Trichlorophenol	0.825	U	0.825		Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330		Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825		Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330		Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330		Dibenzo(a,h)anthracene	0.330	U 0.330
					Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1017  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	79	23 - 120
2-Fluorobiphenyl	81	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	68	25 - 121
2,4,6-Tribromophenol	81	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1017  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 116.279  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.8	N	1.0	7060	11/09/93
Aluminum	13000	N*	23	6010	11/23/93
Barium	83	N*	23	6010	11/23/93
Beryllium	1.1		0.58	6010	11/23/93
Cadmium	0.58	U	0.58	6010	11/23/93
Chromium	12		1.2	6010	11/23/93
Copper	7.6		2.9	6010	11/23/93
Iron	12000	N*	12	6010	11/23/93
Nickel	10	N	4.7	6010	11/23/93
Lead	9.5	N	1.2	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/06/93
Silver	1.2	U	1.2	6010	11/23/93
Zinc	20		2.3	6010	11/23/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1018  
SAMPLE DATE: 10/21/93 14:15:00  
SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
TPH - IR		1.0U	1.0 MG/L	11/05/93	EPA418_1

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: E3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1018  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	9.3		5
Methylene chloride	7.7	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	2.6	J	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	3.2	J	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	6.6		5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	93	88 - 110
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	101	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1018**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **WATER**  
 DILUTION FACTOR (6010): **1.00000**  
 UNITS: **MG/L**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	11/16/93
Barium	0.20	U	0.20	6010	11/16/93
Beryllium	0.0050	U	0.0050	6010	11/16/93
Cadmium	0.0050	U	0.0050	6010	11/16/93
Chromium	0.091		0.010	6010	11/16/93
Copper	0.025	U	0.025	6010	11/16/93
Iron	2.1		0.10	6010	11/16/93
Nickel	0.040	U	0.040	6010	11/16/93
Lead	0.0077		0.0030	7421	11/11/93
Mercury	0.00020	U	0.00020	7471	11/08/93
Silver	0.010	U	0.010	6010	11/16/93
Zinc	0.020	U	0.020	6010	11/16/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1019  
SAMPLE DATE: 10/21/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1019  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.8	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.9	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.0	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1019  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporti	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
3(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.13	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1019  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	75	23 - 120
2-Fluorobiphenyl	79	30 - 115
Terphenyl-D14	83	18 - 137
Phenol-D5	65	24 - 113
2-Fluorophenol	63	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1019  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 117.647  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	7.8	N	1.2	7060	11/09/93
Aluminum	7400	N*	24	6010	11/23/93
Barium	3400	N*	24	6010	11/23/93
Beryllium	1.1		0.59	6010	11/23/93
Cadmium	0.85		0.59	6010	11/23/93
Chromium	11		1.2	6010	11/23/93
Copper	14		2.9	6010	11/23/93
Iron	16000	N*	12	6010	11/23/93
Nickel	34	N	4.7	6010	11/23/93
Lead	18	N	1.4	7421	11/09/93
Mercury	0.024	U	0.024	7471	11/06/93
Silver	1.2	U	1.2	6010	11/23/93
Zinc	17		2.4	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Duplicate analysis outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs, affecting all soil samples in batch. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1019-MS  
SAMPLE DATE: 10/21/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Units</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>		<u>Analyzed</u>	<u>Reference</u>
Chromium VI		88		% REC	11/02/93	EPA7196

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1019-MS  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/03/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	95	Trichloroethene	81
		Benzene	98
		Toluene	99
		Chlorobenzene	101

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684 Work Order: B3-10-300

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1019-MS**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/29/93**  
 ANALYSIS DATE: **11/02/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **% REC**

	Result		Result
Phenol	70	Acenaphthene	96
2-Chlorophenol	80	4-Nitrophenol	85
1,4-Dichlorobenzene	68	2,4-Dinitrotoluene	80
N-Nitroso-di-n-propylamine	86	Pentachlorophenol	79
1,2,4-Trichlorobenzene	82	Pyrene	92
4-Chloro-3-methylphenol	85		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	79	30 - 115
Terphenyl-D14	82	18 - 137
Phenol-D5	67	24 - 113
2-Fluorophenol	70	25 - 121
2,4,6-Tribromophenol	81	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1019-MS  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 88.4955  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	139			7060	11/09/93
Aluminum	973		18	6010	11/23/93
Barium	0		18	6010	11/23/93
Beryllium	85		0.44	6010	11/23/93
Cadmium	84		0.44	6010	11/23/93
Chromium	90		0.88	6010	11/23/93
Copper	82		2.2	6010	11/23/93
Iron	0		8.8	6010	11/23/93
Nickel	74		3.5	6010	11/23/93
Lead	0			7421	11/09/93
Mercury	104			7471	11/06/93
Silver	85		0.88	6010	11/23/93
Zinc	86		1.8	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium, iron and nickel analysis by ICPES, affecting all soil samples in batch. LCS / LCSD and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1019-MSD  
SAMPLE DATE: 10/21/93 14:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		94		% REC	11/02/93	EPA7196

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1019-MSD  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/03/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	93	Trichloroethene	82
		Benzene	99
		Toluene	100
		Chlorobenzene	103

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1019-MSD  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: % REC

	Result		Result
Phenol	74	Acenaphthene	95
2-Chlorophenol	84	4-Nitrophenol	77
1,4-Dichlorobenzene	72	2,4-Dinitrotoluene	79
N-Nitroso-di-n-propylamine	85	Pentachlorophenol	73
1,2,4-Trichlorobenzene	83	Pyrene	96
4-Chloro-3-methylphenol	86		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	73	23 - 120
2-Fluorobiphenyl	76	30 - 115
Terphenyl-D14	82	18 - 137
Phenol-D5	68	24 - 113
2-Fluorophenol	70	25 - 121
2,4,6-Tribromophenol	75	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1019-MSD  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 104.166  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	141			7060	11/09/93
Aluminum	808		21	6010	11/23/93
Barium	0		21	6010	11/23/93
Beryllium	85		0.52	6010	11/23/93
Cadmium	83		0.52	6010	11/23/93
Chromium	90		1.0	6010	11/23/93
Copper	82		2.6	6010	11/23/93
Iron	0		10	6010	11/23/93
Nickel	74		4.2	6010	11/23/93
Lead	0			7421	11/09/93
Mercury	107			7471	11/06/93
Silver	85		1.0	6010	11/23/93
Zinc	85		2.1	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike duplicate outside control limits due to matrix interference on aluminum, barium, iron and nickel analysis by ICPEs, affecting all soil samples in batch. LCS / LCSD and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX

409832-003-01 (512) 892-6684 Work Order: B3-10-300

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SAMPLE ID: A1020  
SAMPLE DATE: 10/21/93 14:30:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 WORK Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1020  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reportin		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.7	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.1	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	3.4	J	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1020  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.20	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1020  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	78	23 - 120
2-Fluorobiphenyl	82	30 - 115
Terphenyl-D14	83	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	71	25 - 121
2,4,6-Tribromophenol	78	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1020  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 87.7192  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	1.1	7060	11/09/93
Aluminum	5200	N*	18	6010	11/23/93
Barium	80	N*	18	6010	11/23/93
Beryllium	0.58		0.44	6010	11/23/93
Cadmium	0.44	U	0.44	6010	11/23/93
Chromium	6.5		0.88	6010	11/23/93
Copper	4.7		2.2	6010	11/23/93
Iron	4700	N*	8.8	6010	11/23/93
Nickel	9.4	N	3.5	6010	11/23/93
Lead	5.8	N	0.32	7421	11/09/93
Mercury	0.021	U	0.021	7471	11/06/93
Silver	0.88	U	0.88	6010	11/23/93
Zinc	13		1.8	6010	11/23/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1021  
SAMPLE DATE: 10/21/93 14:35:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1021  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.0	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.2	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	3.4	J	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.2	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	98	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1021  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1021  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	76	23 - 120
2-Fluorobiphenyl	76	30 - 115
Terphenyl-D14	80	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	71	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 WORK Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1021**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **90.0900**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.0	UN	1.0	7060	11/09/93
Aluminum	6700	N*	18	6010	11/23/93
Barium	630	N*	18	6010	11/23/93
Beryllium	0.72		0.45	6010	11/23/93
Cadmium	0.45	U	0.45	6010	11/23/93
Chromium	10		0.90	6010	11/23/93
Copper	6.2		2.3	6010	11/23/93
Iron	10000	N*	9.0	6010	11/23/93
Nickel	11	N	3.6	6010	11/23/93
Lead	5.4	N	0.31	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/06/93
Silver	0.90	U	0.90	6010	11/23/93
Zinc	14		1.8	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

SAMPLE ID: A1500  
SAMPLE DATE: 10/21/93 11:18:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1500  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.1	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.3	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.4	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1500  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.26	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1500  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	79	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	65	24 - 113
2-Fluorophenol	56	25 - 121
2,4,6-Tribromophenol	95	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1500**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **568.181**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	5.4	UN	5.4	7060	11/10/93
Aluminum	15000	N*	110	6010	11/23/93
Barium	1100	N*	110	6010	11/23/93
Beryllium	2.8	U	2.8	6010	11/23/93
Cadmium	2.8	U	2.8	6010	11/23/93
Chromium	13		5.7	6010	11/23/93
Copper	14	U	14	6010	11/23/93
Iron	13000	N*	57	6010	11/23/93
Nickel	23	N	23	6010	11/23/93
Lead	4.0	N	0.33	7421	11/09/93
Mercury	0.021	U	0.021	7471	11/06/93
Silver	5.7	U	5.7	6010	11/23/93
Zinc	30		11	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1501  
SAMPLE DATE: 10/21/93 12:57:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1501  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.7	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.1	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ns-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.2	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	105	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1501  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting Qual	Limit		Result	Reporting Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.084	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1501  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	92	18 - 137
Phenol-D5	64	24 - 113
2-Fluorophenol	55	25 - 121
2,4,6-Tribromophenol	100	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1501**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **104.166**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.9	N	0.93	7060	11/09/93
Aluminum	9900	N*	21	6010	11/23/93
Barium	550	N*	21	6010	11/23/93
Beryllium	1.1		0.52	6010	11/23/93
Cadmium	0.52	U	0.52	6010	11/23/93
Chromium	11		1.0	6010	11/23/93
Copper	5.9		2.6	6010	11/23/93
Iron	11000	N*	10	6010	11/23/93
Nickel	7.3	N	4.2	6010	11/23/93
Lead	8.5	N	1.1	7421	11/09/93
Mercury	0.024	U	0.024	7471	11/06/93
Silver	1.0	U	1.0	6010	11/23/93
Zinc	13		2.1	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1502  
SAMPLE DATE: 10/21/93 14:44:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1502  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	35	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	7.0	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	105	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1502  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

Reporting			Reporting		
Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.05	J 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.18	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1502  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	71	23 - 120
2-Fluorobiphenyl	82	30 - 115
Terphenyl-D14	90	18 - 137
Phenol-D5	62	24 - 113
2-Fluorophenol	52	25 - 121
2,4,6-Tribromophenol	108	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 WORK ORDER: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1502  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 90.9090  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.1	N	1.1	7060	11/09/93
Aluminum	10000	N*	18	6010	11/23/93
Barium	330	N*	18	6010	11/23/93
Beryllium	0.91		0.45	6010	11/23/93
Cadmium	0.45	U	0.45	6010	11/23/93
Chromium	12		0.91	6010	11/23/93
Copper	5.7		2.3	6010	11/23/93
Iron	11000	N*	9.1	6010	11/23/93
Nickel	8.9	N	3.6	6010	11/23/93
Lead	8.4	N	0.32	7421	11/09/93
Mercury	0.021	U	0.021	7471	11/06/93
Silver	0.91	U	0.91	6010	11/23/93
Zinc	21		1.8	6010	11/23/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1503  
SAMPLE DATE: 10/21/93 14:44:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1503  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.8	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	28	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.3	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	106	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX

409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1503  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.21	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1503**  
SAMPLE DATE: **10/21/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	68	23 - 120
2-Fluorobiphenyl	82	30 - 115
Terphenyl-D14	85	18 - 137
Phenol-D5	60	24 - 113
2-Fluorophenol	51	25 - 121
2,4,6-Tribromophenol	99	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1503**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **111.111**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.6	N	1.2	7060	11/09/93
Aluminum	13000	N*	22	6010	11/23/93
Barium	470	N*	22	6010	11/23/93
Beryllium	1.1		0.56	6010	11/23/93
Cadmium	0.56	U	0.56	6010	11/23/93
Chromium	14		1.1	6010	11/23/93
Copper	16		2.8	6010	11/23/93
Iron	13000	N*	11	6010	11/23/93
Nickel	11	N	4.4	6010	11/23/93
Lead	6.6	N	0.35	7421	11/09/93
Mercury	0.024	U	0.024	7471	11/06/93
Silver	1.1	U	1.1	6010	11/23/93
Zinc	20		2.2	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

SAMPLE ID: A1504  
SAMPLE DATE: 10/21/93 15:05:00  
SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Chromium VI		0.10U	0.010	MG/L	10/22/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1504  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	7.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	91	88 - 110
BROMOFLUOROBENZENE	94	86 - 115
1,2-DICHLOROETHANE-D4	100	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1504  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0

	UNITS:	UG/L	Reporting				UG/L	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol			10	U	10	2,6-Dinitrotoluene	10	U	10	
bis(2-Chloroethyl)ether			10	U	10	3-Nitroaniline	25	U	25	
2-Chlorophenol			10	U	10	Acenaphthene	10	U	10	
1,3-Dichlorobenzene			10	U	10	2,4-Dinitrophenol	25	U	25	
1,4-Dichlorobenzene			10	U	10	4-Nitrophenol	25	U	25	
Benzyl alcohol			10	U	10	Dibenzofuran	10	U	10	
1,2-Dichlorobenzene			10	U	10	2,4-Dinitrotoluene	10	U	10	
2-Methylphenol			10	U	10	Diethylphthalate	10	U	10	
(2-Chloroisopropyl)ether			10	U	10	4-Chlorophenyl-phenylether	10	U	10	
Methylphenol			10	U	10	Fluorene	10	U	10	
N-Nitroso-di-n-propylamine			10	U	10	4-Nitroaniline	10	U	10	
Hexachloroethane			10	U	10	4,6-Dinitro-2-methylphenol	25	U	25	
Nitrobenzene			10	U	10	N-Nitrosodiphenylamine (1)	10	U	10	
Isophorone			10	U	10	4-Bromophenyl-phenylether	10	U	10	
2-Nitrophenol			10	U	10	Hexachlorobenzene	10	U	10	
2,4-Dimethylphenol			10	U	10	Pentachlorophenol	25	U	25	
Benzoic Acid			10	U	10	Phenanthrene	10	U	10	
bis(2-Chloroethoxy)methane			10	U	10	Anthracene	10	U	10	
2,4-Dichlorophenol			10	U	10	Di-n-butylphthalate	10	U	10	
1,2,4-Trichlorobenzene			10	U	10	Fluoranthene	10	U	10	
Naphthalene			10	U	10	Pyrene	10	U	10	
4-Chloroaniline			10	U	10	Butylbenzylphthalate	10	U	10	
Hexachlorobutadiene			10	U	10	3,3'-Dichlorobenzidine	10	U	10	
4-Chloro-3-methylphenol			10	U	10	Benzo(a)anthracene	10	U	10	
2-Methylnaphthalene			10	U	10	Chrysene	10	U	10	
Hexachlorocyclopentadiene			10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10	
2,4,6-Trichlorophenol			10	U	10	Di-n-octylphthalate	10	U	10	
2,4,5-Trichlorophenol			10	U	10	Benzo(b)fluoranthene	10	U	10	
2-Chloronaphthalene			10	U	10	Benzo(k)fluoranthene	10	U	10	
2-Nitroaniline			25	U	25	Benzo(a)pyrene	10	U	10	
Dimethylphthalate			10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10	
Acenaphthylene			10	U	10	Dibenzo(a,h)anthracene	10	U	10	
						Benzo(g,h,i)perylene	10	U	10	

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1504**  
SAMPLE DATE: **10/21/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	68	35 - 114
2-Fluorobiphenyl	71	43 - 116
Terphenyl-D14	84	33 - 141
Phenol-D5	40	10 - 94
2-Fluorophenol	60	21 - 100
2,4,6-Tribromophenol	78	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1504**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **WATER**  
 DILUTION FACTOR (6010): **1.00000**  
 UNITS: **mg/L**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	11/16/93
Barium	0.20	U	0.20	6010	11/16/93
Beryllium	0.0050	U	0.0050	6010	11/16/93
Cadmium	0.0050	U	0.0050	6010	11/16/93
Chromium	0.010	U	0.010	6010	11/16/93
Copper	0.025	U	0.025	6010	11/16/93
Iron	0.10	U	0.10	6010	11/16/93
Nickel	0.040	U	0.040	6010	11/16/93
Lead	0.0030	U	0.0030	7421	11/11/93
Mercury	0.00020	U	0.00020	7471	11/08/93
Silver	0.010	U	0.010	6010	11/16/93
Zinc	0.020	U	0.020	6010	11/16/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1505  
SAMPLE DATE: 10/21/93 16:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: E3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1505  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	3.2	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.7	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	93	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1505  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/08/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting			Result	Reporti	
		Qual	Limit			Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
3(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.13	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1505  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	66	23 - 120
2-Fluorobiphenyl	81	30 - 115
Terphenyl-D14	82	18 - 137
Phenol-D5	60	24 - 113
2-Fluorophenol	50	25 - 121
2,4,6-Tribromophenol	96	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1505  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 100.000  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.8	N	1.0	7060	11/09/93
Aluminum	8300	N*	20	6010	11/23/93
Barium	370	N*	20	6010	11/23/93
Beryllium	0.87		0.50	6010	11/23/93
Cadmium	0.50	U	0.50	6010	11/23/93
Chromium	11		1.0	6010	11/23/93
Copper	5.5		2.5	6010	11/23/93
Iron	9500	N*	10	6010	11/23/93
Nickel	9.1	N	4.0	6010	11/23/93
Lead	6.4	N	0.31	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/06/93
Silver	1.0	U	1.0	6010	11/23/93
Zinc	18		2.0	6010	11/23/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-300

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SAMPLE ID: A1506  
SAMPLE DATE: 10/21/93 16:50:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1506  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.6	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.8	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 409832-003-01 (512) 892-6684  
 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1506  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting Qual	Limit		Result	Reporting Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
1-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.082	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1506  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	58	23 - 120
2-Fluorobiphenyl	68	30 - 115
Terphenyl-D14	69	18 - 137
Phenol-D5	52	24 - 113
2-Fluorophenol	65	25 - 121
2,4,6-Tribromophenol	56	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1506**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **104.166**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.4	N	0.93	7060	11/09/93
Aluminum	7200	N*	21	6010	11/23/93
Barium	130	N*	21	6010	11/23/93
Beryllium	1.1		0.52	6010	11/23/93
Cadmium	0.52	U	0.52	6010	11/23/93
Chromium	11		1.0	6010	11/23/93
Copper	9.0		2.6	6010	11/23/93
Iron	10000	N*	10	6010	11/23/93
Nickel	17	N	4.2	6010	11/23/93
Lead	8.6	N	1.1	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/06/93
Silver	1.0	U	1.0	6010	11/23/93
Zinc	20		2.1	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: A1507  
SAMPLE DATE: 10/21/93 17:08:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1507  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.5	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
rans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.5	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	110	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1507  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
4-Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.27	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPAS270

SAMPLE ID: A1507  
SAMPLE DATE: 10/21/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	73	23 - 120
2-Fluorobiphenyl	85	30 - 115
Terphenyl-D14	83	18 - 137
Phenol-D5	64	24 - 113
2-Fluorophenol	84	25 - 121
2,4,6-Tribromophenol	66	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1507**  
 SAMPLE DATE: **10/21/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **116.279**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.6	N	1.1	7060	11/09/93
Aluminum	9000	N*	23	6010	11/23/93
Barium	76	N*	23	6010	11/23/93
Beryllium	1.1		0.58	6010	11/23/93
Cadmium	0.58	U	0.58	6010	11/23/93
Chromium	13		1.2	6010	11/23/93
Copper	9.8		2.9	6010	11/23/93
Iron	13000	N*	12	6010	11/23/93
Nickel	20	N	4.7	6010	11/23/93
Lead	8.6	N	0.33	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/06/93
Silver	1.2	U	1.2	6010	11/23/93
Zinc	25		2.3	6010	11/23/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1508  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	93	88 - 110
BROMOFLUOROBENZENE	98	86 - 115
1,2-DICHLOROETHANE-D4	102	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: LAB BLANK #1  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.1	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	102	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: AEW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
3(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.14	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK #1**  
SAMPLE DATE: **not spec**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	80	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	66	25 - 121
2,4,6-Tribromophenol	78	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 1.00000  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/09/93
Aluminum	0.20	U	0.20	6010	11/23/93
Barium	0.20	U	0.20	6010	11/23/93
Beryllium	0.0050	U	0.0050	6010	11/23/93
Cadmium	0.0050	U	0.0050	6010	11/23/93
Chromium	0.010	U	0.010	6010	11/23/93
Copper	0.025	U	0.025	6010	11/23/93
Iron	0.10	U	0.10	6010	11/23/93
Nickel	0.040	U	0.040	6010	11/23/93
Lead	0.0030	U	0.0030	7421	11/09/93
Mercury	0.00020	U	0.00020	7471	11/06/93
Silver	0.010	U	0.010	6010	11/23/93
Zinc	0.020	U	0.020	6010	11/23/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #2  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.7	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.3	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.6	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-300  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #3  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	3.2	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	99	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

SAMPLE ID: LAB BLANK  
SAMPLE DATE:  
SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
TPH - IR		1.0U	1.0	MG/L	11/05/93	EPA418_1
Chromium VI		0.010U	0.010	MG/L	10/22/93	EPA7196

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPAS240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	11		10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	88 - 110
BROMOFLUOROBENZENE	95	86 - 115
1,2-DICHLOROETHANE-D4	101	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 10/29/93  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0

	UNITS:	UG/L	Reporting				UG/L	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		10	U	10	2,6-Dinitrotoluene	10	U	10		
bis(2-Chloroethyl)ether		10	U	10	3-Nitroaniline	25	U	25		
2-Chlorophenol		10	U	10	Acenaphthene	10	U	10		
1,3-Dichlorobenzene		10	U	10	2,4-Dinitrophenol	25	U	25		
1,4-Dichlorobenzene		1.4	J	10	4-Nitrophenol	25	U	25		
Benzyl alcohol		10	U	10	Dibenzofuran	10	U	10		
1,2-Dichlorobenzene		10	U	10	2,4-Dinitrotoluene	10	U	10		
2-Methylphenol		10	U	10	Diethylphthalate	10	U	10		
(2-Chloroisopropyl)ether		10	U	10	4-Chlorophenyl-phenylether	10	U	10		
Methylphenol		10	U	10	Fluorene	10	U	10		
N-Nitroso-di-n-propylamine		10	U	10	4-Nitroaniline	10	U	10		
Hexachloroethane		10	U	10	4,6-Dinitro-2-methylphenol	25	U	25		
Nitrobenzene		10	U	10	N-Nitrosodiphenylamine (1)	10	U	10		
Isophorone		10	U	10	4-Bromophenyl-phenylether	10	U	10		
2-Nitrophenol		10	U	10	Hexachlorobenzene	10	U	10		
2,4-Dimethylphenol		10	U	10	Pentachlorophenol	25	U	25		
Benzoic Acid		10	U	10	Phenanthrene	10	U	10		
bis(2-Chloroethoxy)methane		10	U	10	Anthracene	10	U	10		
2,4-Dichlorophenol		10	U	10	Di-n-butylphthalate	10	U	10		
1,2,4-Trichlorobenzene		10	U	10	Fluoranthene	10	U	10		
Naphthalene		10	U	10	Pyrene	10	U	10		
4-Chloroaniline		10	U	10	Butylbenzylphthalate	10	U	10		
Hexachlorobutadiene		10	U	10	3,3'-Dichlorobenzidine	10	U	10		
4-Chloro-3-methylphenol		10	U	10	Benzo(a)anthracene	10	U	10		
2-Methylnaphthalene		10	U	10	Chrysene	10	U	10		
Hexachlorocyclopentadiene		10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10		
2,4,6-Trichlorophenol		10	U	10	Di-n-octylphthalate	10	U	10		
2,4,5-Trichlorophenol		10	U	10	Benzo(b)fluoranthene	10	U	10		
2-Chloronaphthalene		10	U	10	Benzo(k)fluoranthene	10	U	10		
2-Nitroaniline		25	U	25	Benzo(a)pyrene	10	U	10		
Dimethylphthalate		10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10		
Acenaphthylene		10	U	10	Dibenzo(a,h)anthracene	10	U	10		
					Benzo(g,h,i)perylene	10	U	10		

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
SAMPLE DATE: not spec  
SAMPLE MATRIX: WATER

Surrogates	% Recovery	Limits
Nitrobenzene-D5	68	35 - 114
2-Fluorobiphenyl	75	43 - 116
Terphenyl-D14	89	33 - 141
Phenol-D5	65	10 - 94
2-Fluorophenol	67	21 - 100
2,4,6-Tribromophenol	67	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/06/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-300

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: WATER  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/L

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	11/16/93
Barium	0.20	U	0.20	6010	11/16/93
Beryllium	0.0050	U	0.0050	6010	11/16/93
Cadmium	0.0050	U	0.0050	6010	11/16/93
Chromium	0.010	U	0.010	6010	11/16/93
Copper	0.025	U	0.025	6010	11/16/93
Iron	0.10	U	0.10	6010	11/16/93
Nickel	0.040	U	0.040	6010	11/16/93
Lead	0.0030	U	0.0030	7421	11/11/93
Mercury	0.00020	U	0.00020	7471	11/08/93
Silver	0.010	U	0.010	6010	11/16/93
Zinc	0.020	U	0.020	6010	11/16/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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SAMPLE ID: LAB BLANK #2  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME **TPH - IR**

TEST CODE **418\_1**

418\_1

Method 418.1: Total Recoverable Petroleum Hydrocarbons, infrared spectrophotometric method. Methods for the chemical analysis of water and wastes. USEPA.

TEST NAME **ICP Metals**

TEST CODE **6010**

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME **Hazardous Substance Vols.** TEST CODE **8240TK**

Hazardous Substance  
List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME **ABN HSL GC/MS Extractables** TEST CODE **8270TK**

Hazardous Substance  
List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME **Arsenic - Graphite Furnace** TEST CODE **AS\_GF**

Arsenic  
Graphite  
Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME **Chromium VI**

TEST CODE **CR\_VI**

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

TEST NAME Mercury

TEST CODE HG\_AA

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Method 245.5-"Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME Metals

TEST CODE ICPTK2

Method not available.

TEST NAME Lead - Graphite Furnace

TEST CODE PB\_GF

Lead  
Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME ICPES Digestion - Water

TEST CODE Z3005

Water Digestion

Method 3005A, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Digestion procedure for the preparation of surface and ground water samples for analysis by flame atomic absorption spectroscopy and inductively coupled plasma spectroscopy. The procedure determines total recoverable or dissolved metals.

TEST NAME GFAA Digestion - Water

TEST CODE Z3020

Water Digestion

Method 3020, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace.

Company: IT CORPORATION  
Date: 12/06/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-300

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TEST NAME **GFAA Digestion - Soil** TEST CODE **Z3050F**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace/Flame AA analysis.

TEST NAME **ICPES Digestion - Soil** TEST CODE **Z3050P**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for ICPES analysis. Equivalent to Method 3050A, SW-846 Update I, July 1992.



**ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD \***

Reference Document No. 314070  
Page 1 of 2

Project Name/No. 1 TRFB-5201 Samples Shipment Date 7 10-21-93 Bill to: 5 409832.03-01  
 Sample Team Members 2 Andrew Gordon Lab Destination 8 ITAS-AUSTIN D.O. 5001  
 Profit Center No. 3 3527 Lab Contact 9 Kurmen Denge  
 Project Manager 4 Jimmy Taylor Project Contact/Phone 12 Don Mcgregor Report to: 10 Jim Jennings  
 Purchase Order No. 6 409832.03 DA.5001 Carrier/Waybill No. 13 FX 8460755422 IT-AUSTIN-ES  
 Required Report Date 11 15 Days

**ONE CONTAINER PER LINE**

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-serve	Requested Testing Program	Condition on Receipt	Disposal Record No.
<u>AD13</u>	<u>Water</u>	<u>10-15-93</u>	<u>Clear glass</u>	<u>40ml</u>	<u>COOL</u>	<u>8240</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD14</u>	<u>Soil</u>	<u>10-21-93</u>	<u>1</u>	<u>125</u>	<u>COOL</u>	<u>8240</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD14</u>	<u>1</u>	<u>10-21-93</u>	<u>1</u>	<u>500</u>	<u>1</u>	<u>8270/6000</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD15</u>	<u>1</u>	<u>10-21-93</u>	<u>1</u>	<u>125</u>	<u>1</u>	<u>8240</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD15</u>	<u>1</u>	<u>10-21-93</u>	<u>1</u>	<u>500</u>	<u>1</u>	<u>8270/6000</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD16</u>	<u>1</u>	<u>10-21-93</u>	<u>1</u>	<u>125</u>	<u>1</u>	<u>8240</u>	<u>Good 10C</u>	<u>6324/100A</u>
<u>AD16</u>	<u>1</u>	<u>10-21-93</u>	<u>1</u>	<u>500</u>	<u>1</u>	<u>8270/6000</u>	<u>Good 10C</u>	<u>6324/100A</u>

Special Instructions: 23

Possible Hazard Identification: 24  
 Non-hazard  Flammable  Skin Irritant  Poison B  Unknown  Sample Disposal: 25  
 Return to Client  Disposal by Lab  Archive (mos.)

Turnaround Time Required: 26  
 Normal  Rush  QC Level: 27  
 1. Relinquished by 28 [Signature] Date: 10-21-93 Time: 1800  
 2. Relinquished by [Signature] Date: 10-21-93 Time: 1800  
 3. Relinquished by [Signature] Date: 10-21-93 Time: 0837

1. Received by 28 [Signature] Date: 10/22/93 Time: 0837  
 2. Received by [Signature] Date: 10/22/93 Time: 0837  
 3. Received by [Signature] Date: 10/22/93 Time: 0837

Comments: 29



INTERNATIONAL  
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CORPORATION

**ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD (cont.) \***

Reference Document No. 30 314070  
Page 2 of 2

Project Name THFB-5001

Project No. 408837.03.01-5001 Samples Shipment Date 10-21-93

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
A1017	Soil	10-21-93 1410	clear glass	175ml	COOL	82410	Good 10C	
A1017	Soil	10-21-93 1410	clear glass	500ml	COOL	8270/6000	Thio/2/193	
A1018	Water	10-21-93 1415	clear glass	40ml	HCL COOL	82410	Seal Recs	
A1018	Water	10-21-93 1415	Poly	35ml	NO3 COOL	6000		
A1018	Water	10-21-93 1415	Amber glass	1L	H2SO4 COOL	8270		
A1019 (ml/ho)	Salt	10-21-93 1420	clear glass	125	COOL	8240		
A1019 (ml/ho)		10-21-93 1420		2x 500		8270/6000		
A1020		10-21-93 1430		125		8240		
A1020		10-21-93 1430		500		8270/6000		
A1021		10-21-93 1435		125		8240		
A1021		10-21-93 1435	X	500	X	8270/6000		

Write: To accompany samples Yellow: Field copy \*See back of form for special instructions.



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CORPORATION

**ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD \***

Reference Document No. 314065  
Page 1 of 2

Project Name/No. 17 NFD 409832  
Sample Team Members 2 L. Rodriguez/H. Wilson

Samples Shipment Date 7 10/21/93  
Lab Destination 8 IT - AUSTIN

Bill to: 5 409832.03  
D.O. 5001

Profit Center No. 3 3527

Lab Contact 9 Karen Bean  
(409) 356 3320

Project Manager 4 Jimmy Taylor

Project Contact/Phone 12 Dan McGeece

Report to: 10 Tim Jennings  
IT - Austin

Purchase Order No. 6 409832.003

Carrier/Waybill No. 13 FEB E. 8460755483

Required Report Date 11 NITAT

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre- 19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
A 1500	SB-015 Soil	10/21/93 1118	Clear glass	125ml	COOL	8240 VOA	Good for use	
A 1500	SB-015 Soil	10/21/93 1118	Clear glass	500ml	COOL	8370 / 6010 / 7000	Good for use	
A 1501	SB-016 Soil	10/21/93 1257	Clear glass	125ml	"	8240 VOA		
A 1501	SB-016 Soil	10/21/93 1257	"	500ml	"	8370 / 6010 / 7000		
A 1502	SB-017 Soil	10/21/93 1444	"	125ml	"	8240 VOA		
A 1502	SB-017 Soil	10/21/93 1444	"	500ml	"	8370 / 6010 / 7000		
A 1503	SB-017 Duplicate	10/21/93 1444	"	125ml	"	8240 VOA		
A 1503	SB-017 Duplicate	10/21/93 1444	"	500ml	"	8370 / 6010 / 7000		

**OFF-LAB  
USE ONLY**

Special Instructions: 23

Possible Hazard Identification: 24

Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal: 25

Return to Client  Disposal by Lab  Archive  (mos.)

Turnaround Time Required: 26

QC Level: 27

Project Specific (specify):

1. Relinquished by 28 *[Signature]* IT EBS Date: 10/21/93  
 (Signature/Affiliation) *[Signature]* H. Wilson Austin Time: 1921

2. Relinquished by  Rush  Normal  Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_

3. Relinquished by Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_

1. Received by 28 *[Signature]* IT Date: 10/21/93  
 (Signature/Affiliation) *[Signature]* IT Time: 0837

2. Received by  Rush  Normal  Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_

3. Received by Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_

Comments: 29



**ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.) \***

Reference Document No. 30 314065  
 Page 2 of 2

Project Name Tiniter 5001

Project No. 409832a

Samples Shipment Date 10/21/93

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time Collected	Container Type	Sample 18 Volume	Pre-19 preservative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A 1504	Egypt. Rinsata	1505 10/21/93	Clear glass	40ml	HCl	8340 VOA	Good 10C	03244100 A
A 1504	" "	1505 10/21/93	Plastic	250ml	HNO <sub>3</sub>	6210/7000 Metals	Good 10C	03244100 A
A 1504	" "	1505 10/21/93	Amber glass	2.5L	cool	8270 SUOC	Good 10C	03244100 A
A 1505	SB - 018 Soil	1600 10/21/93	Clear glass	125ml	cool	8240 VOC	Good 10C	03244100 A
A 1505	SB - 018 Soil	1600 10/21/93	Clear glass	500ml	cool	6010/7000	Good 10C	03244100 A
A 1506	SB - 019 Soil	1650 10/21/93	Clear glass	125ml	"	8340 VOC	Good 10C	03244100 A
A 1506	SB - 019 Soil	1650 10/21/93	"	500ml	"	8270 SUOC 6010/7000 metals	Good 10C	03244100 A
A 1507	SB - 020 Soil	1708 10/21/93	"	125ml	"	8240 VOC	Good 10C	03244100 A
A 1507	SB - 020 Soil	1708 10/21/93	"	500ml	"	8270 SUOC 6010/7000 metals	Good 10C	03244100 A
A 1508	Trip Blank	1700 10/19/93	Clear glass	40ml	HCl	8240 VOC	Good 10C	03244100 A

Write: To accompany samples  
 Yellow: Field copy  
 \* See back of form for special instructions.

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1014

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	100
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	102
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	100

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1015

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B	Arsenic	B310300-21B	11053050F1	03/05/94	11/09/93	97
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	114
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	97

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1016

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
O4B						
	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	97
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	109
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	97

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1017

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	102
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	116
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	408

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1018

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
06B						
	Arsenic	B310300-24B	110930201	11/09/93	11/12/93	1.0
	Mercury	B310300-24B	1108HGAA1	11/08/93	11/08/93	1.0
	418_1	B310300-24B	1103TPHIR1	11/03/93	11/05/93	1.0
	Lead	B310300-24B	110930201	11/09/93	11/11/93	1.0

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1019

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	115
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	120
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	460

## Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1019-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	430
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	106
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	430

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1019-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
09B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	377
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	112
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	377

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1020

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	105
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	103
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	105

## Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1021

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
11B						
	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	103
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	109
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	103

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1500

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
12B	Arsenic	B310300-21B	11053050F1	11/05/93	11/10/93	543
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	104
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	109

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1501

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
13B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	92.6
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	118
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	370

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1502

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
14B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	106
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	104
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	106

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1503

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
15B	Arsenic	B310300-21B	11053050F1	03/25/94	11/09/93	116
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	119
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	116

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1504

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
16B	Arsenic	B310300-24B	110930201	11/09/93	11/12/93	1.0
	Chromium VI	B310300-24B	1022CR_VI1	10/22/93	10/22/93	1.0
	Mercury	B310300-24B	1108HGAA1	11/08/93	11/08/93	1.0
	Lead	B310300-24B	110930201	11/09/93	11/11/93	1.0

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1505

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
17B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	104
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	116
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	104

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1506

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
18B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	92.6
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	111
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	370

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : A1507

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
19B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	111
	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	112
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	111

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : LAB BLANK #1

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
21B	Arsenic	B310300-21B	11053050F1	11/05/93	11/09/93	1.0
	Chromium VI	B310300-21B	1102CR_VI1	11/02/93	11/02/93	1.0
	Mercury	B310300-21B	1106HGAA1	11/06/93	11/06/93	1.0
	Lead	B310300-21B	11053050F1	11/05/93	11/09/93	1.0

## Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : LAB BLANK

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
24B	Arsenic	B310300-24B	110930201	11/09/93		1.0
	Chromium VI	B310300-24B	1122CR_VI1	10/22/93	10/22/93	1.0
	Mercury	B310300-21B	1108HGAA1	11/08/93		1.0
	Lead	B310300-24B	110930201	11/09/93		1.0

Auxiliary Data Summary

12/03/93

Work order : B310300

Sample ID : LAB BLANK #2

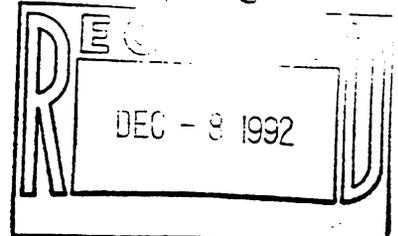
FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
25A	Chromium VI	B310300-25A	1103CR_VI1	11/03/93	11/03/93	1.0





**INTERNATIONAL  
TECHNOLOGY  
CORPORATION**

*Routed to K.H. CF. TL 12/9/93*  
**ANALYTICAL  
SERVICES**



**CERTIFICATE OF ANALYSIS**

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/04/93

Work Order: B3-10-297

This is the Certificate of Analysis for the following samples:

Client Work ID: D.O. 5001  
Date Received: 10/23/93  
Number of Samples: 26  
Sample Type: SOIL/WATER

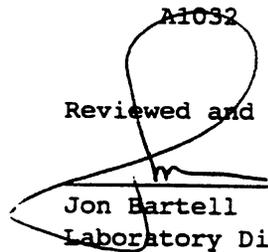
409832-003-01

**I. Introduction**

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1022	B3-10-297-01
A1023	B3-10-297-02
A1024	B3-10-297-03
A1025	B3-10-297-04
A1026	B3-10-297-05
A1027	B3-10-297-06
A1028	B3-10-297-07
A1028-MS	B3-10-297-08
A1028-MSD	B3-10-297-09
A1029	B3-10-297-10
A1030	B3-10-297-11
A1031	B3-10-297-12
A1032	B3-10-297-13

Reviewed and Approved:

  
Jon Bartell  
Laboratory Director

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories  
American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1033	B3-10-297-14
A1034	B3-10-297-15
A1035	B3-10-297-16
A1036	B3-10-297-17
A1037	B3-10-297-18
A1038	B3-10-297-19
A1039	B3-10-297-20
A1040	B3-10-297-21
LAB BLANK	B3-10-297-22
LAB BLANK#2	B3-10-297-23
LAB BLANK#3	B3-10-297-24
LAB BLANK#4	B3-10-297-25
LAB BLANK	B3-10-297-26

## II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

## III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

---

SAMPLE ID: A1022  
SAMPLE DATE: 10/22/93 07:40:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1022  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	14	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	6	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1022  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting				Reportin		
		Result	Qual	Limit		Result	Qual	Limit
		0.033	J	0.330	2,6-Dinitrotoluene	0.330	U	0.330
		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	Acenaphthene	0.330	U	0.330
		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
		0.330	U	0.330	Dibenzofuran	0.330	U	0.330
		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
		0.330	U	0.330	Diethylphthalate	0.330	U	0.330
		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Fluorene	0.330	U	0.330
		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
		0.330	U	0.330	Phenanthrene	0.330	U	0.330
		0.330	U	0.330	Anthracene	0.330	U	0.330
		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
		0.330	U	0.330	Fluoranthene	0.330	U	0.330
		0.330	U	0.330	Pyrene	0.330	U	0.330
		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
		0.330	U	0.330	Chrysene	0.330	U	0.330
		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
		0.330	U	0.330	Di-n-octylphthalate	0.33	JB	0.330
		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
		0.330	U	0.330	Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1022  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	84	23 - 120
2-Fluorobiphenyl	100	30 - 115
Terphenyl-D14	102	18 - 137
Phenol-D5	80	24 - 113
2-Fluorophenol	78	25 - 121
2,4,6-Tribromophenol	92	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1022  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 105.263  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	5.2	N	1.0	7060	11/10/93
Aluminum	17000	N	21	6010	11/12/93
Barium	230	N*	21	6010	11/12/93
Beryllium	0.89		0.53	6010	11/12/93
Cadmium	0.83		0.53	6010	11/12/93
Chromium	19		1.1	6010	11/12/93
Copper	7.4		2.6	6010	11/12/93
Iron	15000	N	11	6010	11/12/93
Nickel	15		4.2	6010	11/12/93
Lead	7.7	N	0.31	7421	11/10/93
Mercury	0.022	U	0.022	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	24		2.1	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1023  
SAMPLE DATE: 10/22/93 07:45:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1023  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.9	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.1	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	107	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1023  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reportin	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.12	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1023  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	76	23 - 120
2-Fluorobiphenyl	96	30 - 115
Terphenyl-D14	98	18 - 137
Phenol-D5	71	24 - 113
2-Fluorophenol	69	25 - 121
2,4,6-Tribromophenol	77	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1023  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 105.263  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	6.0	N	1.1	7060	11/10/93
Aluminum	17000	N	21	6010	11/12/93
Barium	310	N*	21	6010	11/12/93
Beryllium	0.95		0.53	6010	11/12/93
Cadmium	0.70		0.53	6010	11/12/93
Chromium	35		1.1	6010	11/12/93
Copper	9.4		2.6	6010	11/12/93
Iron	17000	N	11	6010	11/12/93
Nickel	22		4.2	6010	11/12/93
Lead	6.1	N	0.32	7421	11/10/93
Mercury	0.022	U	0.022	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	26		2.1	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1024  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	6.7	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	93	88 - 110
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	96	70 - 120

**Data Qualifier Key:**  
 U - none detected  
 J - estimated value (less than the sample quantitation limit)  
 B - analyte is found in the associated blank as well as in the sample  
 'blank' - positive result  
 \* - Surrogate recovery is outside QC limit  
 D - compound identified at a secondary dilution factor  
 E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1025  
SAMPLE DATE: 10/22/93 07:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1025  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	8.9	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.7	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1025  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
		0.330	U 0.330	Phenol	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroethyl)ether	0.330	U 0.330
		0.330	U 0.330	2-Chlorophenol	0.330	U 0.330
		0.330	U 0.330	1,3-Dichlorobenzene	0.330	U 0.330
		0.330	U 0.330	1,4-Dichlorobenzene	0.330	U 0.330
		0.330	U 0.330	Benzyl alcohol	0.330	U 0.330
		0.330	U 0.330	1,2-Dichlorobenzene	0.330	U 0.330
		0.330	U 0.330	2-Methylphenol	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroisopropyl)ether	0.330	U 0.330
		0.330	U 0.330	4-Methylphenol	0.330	U 0.330
		0.330	U 0.330	N-Nitroso-di-n-propylamine	0.330	U 0.330
		0.330	U 0.330	Hexachloroethane	0.330	U 0.330
		0.330	U 0.330	Nitrobenzene	0.330	U 0.330
		0.330	U 0.330	Isophorone	0.330	U 0.330
		0.330	U 0.330	2-Nitrophenol	0.330	U 0.330
		0.330	U 0.330	2,4-Dimethylphenol	0.330	U 0.330
		0.330	U 0.330	Benzoic Acid	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroethoxy)methane	0.330	U 0.330
		0.330	U 0.330	2,4-Dichlorophenol	0.330	U 0.330
		0.330	U 0.330	1,2,4-Trichlorobenzene	0.330	U 0.330
		0.330	U 0.330	Naphthalene	0.330	U 0.330
		0.330	U 0.330	4-Chloroaniline	0.330	U 0.330
		0.330	U 0.330	Hexachlorobutadiene	0.330	U 0.330
		0.330	U 0.330	4-Chloro-3-methylphenol	0.330	U 0.330
		0.330	U 0.330	2-Methylnaphthalene	0.330	U 0.330
		0.330	U 0.330	Hexachlorocyclopentadiene	0.330	U 0.330
		0.330	U 0.330	2,4,6-Trichlorophenol	0.330	U 0.330
		0.825	U 0.825	2,4,5-Trichlorophenol	0.825	U 0.825
		0.330	U 0.330	2-Chloronaphthalene	0.330	U 0.330
		0.825	U 0.825	2-Nitroaniline	0.825	U 0.825
		0.330	U 0.330	Dimethylphthalate	0.330	U 0.330
		0.330	U 0.330	Acenaphthylene	0.330	U 0.330
		0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
		0.825	U 0.825	3-Nitroaniline	0.825	U 0.825
		0.330	U 0.330	Acenaphthene	0.330	U 0.330
		0.825	U 0.825	2,4-Dinitrophenol	0.825	U 0.825
		0.825	U 0.825	4-Nitrophenol	0.825	U 0.825
		0.330	U 0.330	Dibenzofuran	0.330	U 0.330
		0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
		0.330	U 0.330	Diethylphthalate	0.330	U 0.330
		0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
		0.330	U 0.330	Fluorene	0.330	U 0.330
		0.825	U 0.825	4-Nitroaniline	0.825	U 0.825
		0.825	U 0.825	4,6-Dinitro-2-methylphenol	0.825	U 0.825
		0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
		0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
		0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
		0.825	U 0.825	Pentachlorophenol	0.825	U 0.825
		0.330	U 0.330	Phenanthrene	0.330	U 0.330
		0.330	U 0.330	Anthracene	0.330	U 0.330
		0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
		0.330	U 0.330	Fluoranthene	0.330	U 0.330
		0.330	U 0.330	Pyrene	0.330	U 0.330
		0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
		0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
		0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
		0.330	U 0.330	Chrysene	0.330	U 0.330
		0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
		0.033	JB 0.330	Di-n-octylphthalate	0.033	JB 0.330
		0.330	U 0.330	Benzo(b)fluoranthene	0.330	U 0.330
		0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
		0.330	U 0.330	Benzo(a)pyrene	0.330	U 0.330
		0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
		0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
		0.330	U 0.330	Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1025**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	94	30 - 115
Terphenyl-D14	98	18 - 137
Phenol-D5	79	24 - 113
2-Fluorophenol	72	25 - 121
2,4,6-Tribromophenol	84	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1025**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **102.040**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.0	N	1.1	7060	11/10/93
Aluminum	11000	N	20	6010	11/12/93
Barium	430	N*	20	6010	11/12/93
Beryllium	0.72		0.51	6010	11/12/93
Cadmium	0.51	U	0.51	6010	11/12/93
Chromium	16		1.0	6010	11/12/93
Copper	7.6		2.6	6010	11/12/93
Iron	14000	N	10	6010	11/12/93
Nickel	15		4.1	6010	11/12/93
Lead	5.9	N	0.32	7421	11/10/93
Mercury	0.024	U	0.024	7471	11/10/93
Silver	1.0	U	1.0	6010	11/12/93
Zinc	20		2.0	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1026  
SAMPLE DATE: 10/22/93 08:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1026  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.4	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.5	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	15		5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	3.5	J	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.1	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:  
 U - none detected  
 J - estimated value (less than the sample quantitation limit)  
 B - analyte is found in the associated blank as well as in the sample  
 'blank' - positive result  
 \* - Surrogate recovery is outside QC limit  
 D - compound identified at a secondary dilution factor  
 E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1026  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting			Reporting	
			Result	Qual Limit		Result	Qual Limit
Phenol			0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether			0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol			0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene			0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene			0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol			0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene			0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol			0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether			0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
2-Chlorophenol			0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine			0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane			0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene			0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone			0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol			0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol			0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid			0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane			0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol			0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene			0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene			0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline			0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene			0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol			0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene			0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene			0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol			0.330	U 0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol			0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene			0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline			0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate			0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene			0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
					Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1026**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	92	30 - 115
Terphenyl-D14	93	18 - 137
Phenol-D5	77	24 - 113
2-Fluorophenol	74	25 - 121
2,4,6-Tribromophenol	82	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1026  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 88.4955  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	0.98	7060	11/10/93
Aluminum	13000	N	18	6010	11/12/93
Barium	510	N*	18	6010	11/12/93
Beryllium	0.77		0.44	6010	11/12/93
Cadmium	0.44	U	0.44	6010	11/12/93
Chromium	17		0.88	6010	11/12/93
Copper	8.5		2.2	6010	11/12/93
Iron	14000	N	8.8	6010	11/12/93
Nickel	15		3.5	6010	11/12/93
Lead	5.7	N	0.29	7421	11/10/93
Mercury	0.020	U	0.020	7471	11/10/93
Silver	0.88	U	0.88	6010	11/12/93
Zinc	21		1.8	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1027  
SAMPLE DATE: 10/22/93 09:45:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1027  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	9.6	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	140	B	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	9.1		5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	9.5	J	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	17	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	2.8	J	5
Carbon tetrachloride	5	U	5	Ethylbenzene	4.2	J	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	22		5

Surrogates	% Recovery	Limits
TOLUENE-D8	108	81 - 117
BROMOFLUOROBENZENE	91	74 - 121
1,2-DICHLOROETHANE-D4	107	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN ESL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1027  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.059	J	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1027**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	100	30 - 115
Terphenyl-D14	108	18 - 137
Phenol-D5	80	24 - 113
2-Fluorophenol	76	25 - 121
2,4,6-Tribromophenol	92	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1027  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 108.695  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.8	N	1.0	7060	11/10/93
Aluminum	18000	N	22	6010	11/12/93
Barium	300	N*	22	6010	11/12/93
Beryllium	1.0		0.54	6010	11/12/93
Cadmium	0.97		0.54	6010	11/12/93
Chromium	21		1.1	6010	11/12/93
Copper	8.5		2.7	6010	11/12/93
Iron	15000	N	11	6010	11/12/93
Nickel	15		4.3	6010	11/12/93
Lead	11	N	1.2	7421	11/10/93
Mercury	0.023	U	0.023	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	29		2.2	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1028  
SAMPLE DATE: 10/22/93 09:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1028  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.3	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.8	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.1	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1028**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/27/93**  
 ANALYSIS DATE: **10/31/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **MG/KG**

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.053	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1028  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	92	23 - 120
2-Fluorobiphenyl	98	30 - 115
Terphenyl-D14	102	18 - 137
Phenol-D5	79	24 - 113
2-Fluorophenol	78	25 - 121
2,4,6-Tribromophenol	83	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1028**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **114.942**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	5.4	N	1.1	7060	11/10/93
Aluminum	15000	N	23	6010	11/12/93
Barium	57	N*	23	6010	11/12/93
Beryllium	0.87		0.57	6010	11/12/93
Cadmium	0.57	U	0.57	6010	11/12/93
Chromium	20		1.1	6010	11/12/93
Copper	6.9		2.9	6010	11/12/93
Iron	13000	N	11	6010	11/12/93
Nickel	18		4.6	6010	11/12/93
Lead	7.4	N	0.32	7421	11/10/93
Mercury	0.024	U	0.024	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	24		2.3	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike recoveries, MS/MSD % RPD and duplicate %RPD were outside control limits for barium due to sample inconsistency. LCS/LCSD recovery and % RPD were acceptable.

Matrix spike recoveries were outside control limits for aluminum and iron. The native sample concentration was greater than 0.1 %, therefore, no spike recovery was required.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1028-MS  
SAMPLE DATE: 10/22/93 09:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		108	% REC	11/03/93	EPA7196

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1028-MS  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/04/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	96	Trichloroethene	84
		Benzene	98
		Toluene	105
		Chlorobenzene	105

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1028-MS**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/27/93**  
 ANALYSIS DATE: **11/09/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **% REC**

	Result		Result
Phenol	73	Acenaphthene	101
2-Chlorophenol	70	4-Nitrophenol	67
1,4-Dichlorobenzene	63	2,4-Dinitrotoluene	80
N-Nitroso-di-n-propylamine	82	Pentachlorophenol	72
1,2,4-Trichlorobenzene	79	Pyrene	90
4-Chloro-3-methylphenol	82		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	78	23 - 120
2-Fluorobiphenyl	98	30 - 115
Terphenyl-D14	90	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	77	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1028-MS**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**  
DILUTION FACTOR (6010): **114.942**  
UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	38	7060	11/10/93
Aluminum	820	6010	11/12/93
Barium	160	6010	11/12/93
Beryllium	91	6010	11/12/93
Cadmium	93	6010	11/12/93
Chromium	94	6010	11/12/93
Copper	95	6010	11/12/93
Iron	910	6010	11/12/93
Nickel	91	6010	11/12/93
Lead	19	7421	11/10/93
Mercury	115	7471	11/10/93
Silver	90	6010	11/12/93
Zinc	92	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike recoveries, MS/MSD % RPD and duplicate %RPD were outside control limits for barium due to sample inconsistency. LCS/LCSD recovery and % RPD were acceptable.

Matrix spike recoveries were outside control limits for aluminum and iron. The native sample concentration was greater than 0.1 %, therefore, no spike recovery was required.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1028-MSD  
SAMPLE DATE: 10/22/93 09:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		114		% REC	11/03/93	EPA7196

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1028-MSD  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/04/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	100	Trichloroethene	85
		Benzene	98
		Toluene	104
		Chlorobenzene	102

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	93	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1028-MSD  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/09/93  
 DILUTION FACTOR: 0.033  
 UNITS: % REC

	Result		Result
Phenol	68	Acenaphthene	94
2-Chlorophenol	67	4-Nitrophenol	61
1,4-Dichlorobenzene	57	2,4-Dinitrotoluene	77
N-Nitroso-di-n-propylamine	74	Pentachlorophenol	67
1,2,4-Trichlorobenzene	73	Pyrene	96
4-Chloro-3-methylphenol	78		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	71	23 - 120
2-Fluorobiphenyl	97	30 - 115
Terphenyl-D14	95	18 - 137
Phenol-D5	67	24 - 113
2-Fluorophenol	61	25 - 121
2,4,6-Tribromophenol	83	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1028-MSD**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **99.0099**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	64	7060	11/10/93
Aluminum	720	6010	11/12/93
Barium	130	6010	11/12/93
Beryllium	89	6010	11/12/93
Cadmium	91	6010	11/12/93
Chromium	91	6010	11/12/93
Copper	91	6010	11/12/93
Iron	310	6010	11/12/93
Nickel	88	6010	11/12/93
Lead	16	7421	11/10/93
Mercury	108	7471	11/10/93
Silver	87	6010	11/12/93
Zinc	89	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike recoveries, MS/MSD % RPD and duplicate %RPD were outside control limits for barium due to sample inconsistency. LCS/LCSD recovery and % RPD were acceptable.

Matrix spike recoveries were outside control limits for aluminum and iron. The native sample concentration was greater than 0.1 %, therefore, no spike recovery was required.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1029  
SAMPLE DATE: 10/22/93 10:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1029  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.7	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	1.4	J	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1029  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting			Reportir	
		Result	Qual Limit		Result	Qual Limit
		0.330	U 0.330	Phenol	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroethyl)ether	0.825	U 0.825
		0.330	U 0.330	2-Chlorophenol	0.330	U 0.330
		0.330	U 0.330	1,3-Dichlorobenzene	0.825	U 0.825
		0.330	U 0.330	1,4-Dichlorobenzene	0.825	U 0.825
		0.330	U 0.330	Benzyl alcohol	0.330	U 0.330
		0.330	U 0.330	1,2-Dichlorobenzene	0.330	U 0.330
		0.330	U 0.330	2-Methylphenol	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroisopropyl)ether	0.330	U 0.330
		0.330	U 0.330	1-Methylphenol	0.330	U 0.330
		0.330	U 0.330	N-Nitroso-di-n-propylamine	0.825	U 0.825
		0.330	U 0.330	Hexachloroethane	0.825	U 0.825
		0.330	U 0.330	Nitrobenzene	0.330	U 0.330
		0.330	U 0.330	Isophorone	0.330	U 0.330
		0.330	U 0.330	2-Nitrophenol	0.330	U 0.330
		0.330	U 0.330	2,4-Dimethylphenol	0.825	U 0.825
		0.330	U 0.330	Benzoic Acid	0.330	U 0.330
		0.330	U 0.330	bis(2-Chloroethoxy)methane	0.330	U 0.330
		0.330	U 0.330	2,4-Dichlorophenol	0.330	U 0.330
		0.330	U 0.330	1,2,4-Trichlorobenzene	0.330	U 0.330
		0.330	U 0.330	Naphthalene	0.330	U 0.330
		0.330	U 0.330	4-Chloroaniline	0.330	U 0.330
		0.330	U 0.330	Hexachlorobutadiene	0.330	U 0.330
		0.330	U 0.330	4-Chloro-3-methylphenol	0.330	U 0.330
		0.330	U 0.330	2-Methylnaphthalene	0.330	U 0.330
		0.330	U 0.330	Hexachlorocyclopentadiene	0.330	U 0.330
		0.330	U 0.330	2,4,6-Trichlorophenol	0.330	U 0.330
		0.825	U 0.825	2,4,5-Trichlorophenol	0.330	U 0.330
		0.330	U 0.330	2-Chloronaphthalene	0.330	U 0.330
		0.825	U 0.825	2-Nitroaniline	0.330	U 0.330
		0.330	U 0.330	Dimethylphthalate	0.330	U 0.330
		0.330	U 0.330	Acenaphthylene	0.330	U 0.330
				2,6-Dinitrotoluene		
				3-Nitroaniline		
				Acenaphthene		
				2,4-Dinitrophenol		
				4-Nitrophenol		
				Dibenzofuran		
				2,4-Dinitrotoluene		
				Diethylphthalate		
				4-Chlorophenyl-phenylether		
				Fluorene		
				4-Nitroaniline		
				4,6-Dinitro-2-methylphenol		
				N-Nitrosodiphenylamine (1)		
				4-Bromophenyl-phenylether		
				Hexachlorobenzene		
				Pentachlorophenol		
				Phenanthrene		
				Anthracene		
				Di-n-butylphthalate		
				Fluoranthene		
				Pyrene		
				Butylbenzylphthalate		
				3,3'-Dichlorobenzidine		
				Benzo(a)anthracene		
				Chrysene		
				bis(2-Ethylhexyl)phthalate		
				Di-n-octylphthalate		
				Benzo(b)fluoranthene		
				Benzo(k)fluoranthene		
				Benzo(a)pyrene		
				Indeno(1,2,3-cd)pyrene		
				Dibenzo(a,h)anthracene		
				Benzo(g,h,i)perylene		

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPAS270**

SAMPLE ID: **A1029**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	72	23 - 120
2-Fluorobiphenyl	90	30 - 115
Terphenyl-D14	104	18 - 137
Phenol-D5	69	24 - 113
2-Fluorophenol	64	25 - 121
2,4,6-Tribromophenol	80	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1029**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**  
DILUTION FACTOR (6010): **107.526**  
UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.9	N	1.0	7060	11/10/93
Aluminum	12000	N	22	6010	11/12/93
Barium	210	N*	22	6010	11/12/93
Beryllium	0.87		0.54	6010	11/12/93
Cadmium	0.72		0.54	6010	11/12/93
Chromium	15		1.1	6010	11/12/93
Copper	8.4		2.7	6010	11/12/93
Iron	14000	N	11	6010	11/12/93
Nickel	14		4.3	6010	11/12/93
Lead	4.7	N	0.31	7421	11/10/93
Mercury	0.024	U	0.024	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	24		2.2	6010	11/12/93

**Data qualifier key:**  
 E - estimated value  
 M - duplicate injection precision not met  
 N - spike recovery not within control limits  
 S - determined by MSA  
 W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance  
 \* - duplicate analysis outside control limits  
 + - Correlation coefficient for the MSA <0.995  
 B - < CRDL but >= IDL  
 U - none detected  
 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1030  
SAMPLE DATE: 10/22/93 10:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1030  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	1.3	J	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.4	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	6.1		5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	0.5	J	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1030  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting				Reportin		
		Result	Qual	Limit		Result	Qual	Limit
		0.330	U	0.330	Phenol	0.330	U	0.330
		0.330	U	0.330	bis(2-Chloroethyl)ether	0.330	U	0.330
		0.330	U	0.330	2-Chlorophenol	0.330	U	0.330
		0.330	U	0.330	1,3-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	1,4-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	Benzyl alcohol	0.330	U	0.330
		0.330	U	0.330	1,2-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	2-Methylphenol	0.330	U	0.330
		0.330	U	0.330	's(2-Chloroisopropyl)ether	0.330	U	0.330
		0.330	U	0.330	4ethylphenol	0.330	U	0.330
		0.330	U	0.330	N-Nitroso-di-n-propylamine	0.330	U	0.330
		0.330	U	0.330	Hexachloroethane	0.330	U	0.330
		0.330	U	0.330	Nitrobenzene	0.330	U	0.330
		0.330	U	0.330	Isophorone	0.330	U	0.330
		0.330	U	0.330	2-Nitrophenol	0.330	U	0.330
		0.330	U	0.330	2,4-Dimethylphenol	0.330	U	0.330
		0.330	U	0.330	Benzoic Acid	0.330	U	0.330
		0.330	U	0.330	bis(2-Chloroethoxy)methane	0.330	U	0.330
		0.330	U	0.330	2,4-Dichlorophenol	0.330	U	0.330
		0.330	U	0.330	1,2,4-Trichlorobenzene	0.330	U	0.330
		0.330	U	0.330	Naphthalene	0.330	U	0.330
		0.330	U	0.330	4-Chloroaniline	0.330	U	0.330
		0.330	U	0.330	Hexachlorobutadiene	0.330	U	0.330
		0.330	U	0.330	4-Chloro-3-methylphenol	0.330	U	0.330
		0.330	U	0.330	2-Methylnaphthalene	0.330	U	0.330
		0.330	U	0.330	Hexachlorocyclopentadiene	0.330	U	0.330
		0.330	U	0.330	2,4,6-Trichlorophenol	0.330	U	0.330
		0.825	U	0.825	2,4,5-Trichlorophenol	0.825	U	0.825
		0.330	U	0.330	2-Chloronaphthalene	0.330	U	0.330
		0.825	U	0.825	2-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	Dimethylphthalate	0.330	U	0.330
		0.330	U	0.330	Acenaphthylene	0.330	U	0.330
		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
		0.825	U	0.825	3-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	Acenaphthene	0.330	U	0.330
		0.825	U	0.825	2,4-Dinitrophenol	0.825	U	0.825
		0.330	U	0.330	4-Nitrophenol	0.330	U	0.330
		0.330	U	0.330	Dibenzofuran	0.330	U	0.330
		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
		0.330	U	0.330	Diethylphthalate	0.330	U	0.330
		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Fluorene	0.330	U	0.330
		0.825	U	0.825	4-Nitroaniline	0.825	U	0.825
		0.825	U	0.825	4,6-Dinitro-2-methylphenol	0.825	U	0.825
		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
		0.825	U	0.825	Pentachlorophenol	0.825	U	0.825
		0.330	U	0.330	Phenanthrene	0.330	U	0.330
		0.330	U	0.330	Anthracene	0.330	U	0.330
		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
		0.330	U	0.330	Fluoranthene	0.330	U	0.330
		0.330	U	0.330	Pyrene	0.330	U	0.330
		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
		0.330	U	0.330	Chrysene	0.330	U	0.330
		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
		0.330	U	0.330	Benzo(b)fluoranthene	0.330	U	0.330
		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
		0.330	U	0.330	Benzo(a)pyrene	0.330	U	0.330
		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
		0.330	U	0.330	Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1030  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	95	30 - 115
Terphenyl-D14	106	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	66	25 - 121
2,4,6-Tribromophenol	84	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1030  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 114.942  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.1	N	0.98	7060	11/10/93
Aluminum	13000	N	23	6010	11/12/93
Barium	960	N*	23	6010	11/12/93
Beryllium	1.0		0.57	6010	11/12/93
Cadmium	0.57	U	0.57	6010	11/12/93
Chromium	22		1.1	6010	11/12/93
Copper	10		2.9	6010	11/12/93
Iron	17000	N	11	6010	11/12/93
Nickel	21		4.6	6010	11/12/93
Lead	7.1	N	0.29	7421	11/10/93
Mercury	0.024	U	0.024	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	27		2.3	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1031  
SAMPLE DATE: 10/22/93 13:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1031  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.3	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	93	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1031  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG			Reporting			Reporting		
	Result	Qual	Limit	Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
4-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
				Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1031  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	90	23 - 120
2-Fluorobiphenyl	108	30 - 115
Terphenyl-D14	106	18 - 137
Phenol-D5	86	24 - 113
2-Fluorophenol	84	25 - 121
2,4,6-Tribromophenol	85	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1031**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **106.382**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.3	N	1.1	7060	11/10/93
Aluminum	14000	N	21	6010	11/12/93
Barium	590	N*	21	6010	11/12/93
Beryllium	0.98		0.53	6010	11/12/93
Cadmium	0.53	U	0.53	6010	11/12/93
Chromium	14		1.1	6010	11/12/93
Copper	8.3		2.7	6010	11/12/93
Iron	11000	N	11	6010	11/12/93
Nickel	10		4.3	6010	11/12/93
Lead	6.2	N	0.32	7421	11/10/93
Mercury	0.025	U	0.025	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	24		2.1	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1032  
SAMPLE DATE: 10/22/93 13:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>		<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1032  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.0	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABW ESL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1032  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting				Reportin		
		Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330	
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825	
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330	
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825	
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825	
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330	
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330	
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330	
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330	
2-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330	
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825	
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825	
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330	
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330	
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330	
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825	
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330	
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330	
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330	
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330	
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330	
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330	
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330	
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330	
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330	
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330	
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330	
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330	
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330	
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330	
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330	
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330	
				Benzo(g,h,i)perylene	0.330	U	0.330	

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1032**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	82	23 - 120
2-Fluorobiphenyl	99	30 - 115
Terphenyl-D14	103	18 - 137
Phenol-D5	75	24 - 113
2-Fluorophenol	72	25 - 121
2,4,6-Tribromophenol	83	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1032  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 107.526  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.8	N	1.2	7060	11/10/93
Aluminum	14000	N	22	6010	11/12/93
Barium	68	N*	22	6010	11/12/93
Beryllium	0.71		0.54	6010	11/12/93
Cadmium	0.54	U	0.54	6010	11/12/93
Chromium	15		1.1	6010	11/12/93
Copper	7.2		2.7	6010	11/12/93
Iron	10000	N	11	6010	11/12/93
Nickel	12		4.3	6010	11/12/93
Lead	4.4	N	0.35	7421	11/10/93
Mercury	0.020	U	0.020	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	23		2.2	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1033  
SAMPLE DATE: 10/22/93 13:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.11	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1033  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	10	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	106	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	111	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1033  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting Qual	Limit		Result	Reporting Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.330	U	0.330
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.825	U	0.825
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.330	U	0.330
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.825	U	0.825
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.330	U	0.330	Benzo(b)fluoranthene	0.039	JB	0.330
1-Chloronaphthalene	0.825	U	0.825	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.330	U	0.330	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.825	U	0.825	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1033  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	78	23 - 120
2-Fluorobiphenyl	104	30 - 115
Terphenyl-D14	107	18 - 137
Phenol-D5	76	24 - 113
2-Fluorophenol	73	25 - 121
2,4,6-Tribromophenol	82	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1033  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 96.1538  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	0.94	7060	11/10/93
Aluminum	13000	N	19	6010	11/12/93
Barium	450	N*	19	6010	11/12/93
Beryllium	0.96		0.48	6010	11/12/93
Cadmium	0.57		0.48	6010	11/12/93
Chromium	16		0.96	6010	11/12/93
Copper	12		2.4	6010	11/12/93
Iron	14000	N	9.6	6010	11/12/93
Nickel	15		3.8	6010	11/12/93
Lead	6.2	N	0.28	7421	11/10/93
Mercury	0.025	U	0.025	7471	11/10/93
Silver	0.96	U	0.96	6010	11/12/93
Zinc	26		1.9	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
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409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1034  
SAMPLE DATE: 10/22/93 13:25:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1034  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.9	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1034  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting				Reportin		
		Result	Qual	Limit		Result	Qual	Limit
		0.330	U	0.330	Phenol	0.330	U	0.330
		0.330	U	0.330	bis(2-Chloroethyl)ether	0.330	U	0.330
		0.330	U	0.330	2-Chlorophenol	0.330	U	0.330
		0.330	U	0.330	1,3-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	1,4-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	Benzyl alcohol	0.330	U	0.330
		0.330	U	0.330	1,2-Dichlorobenzene	0.330	U	0.330
		0.330	U	0.330	2-Methylphenol	0.330	U	0.330
		0.330	U	0.330	bis(2-Chloroisopropyl)ether	0.330	U	0.330
		0.330	U	0.330	methylphenol	0.330	U	0.330
		0.330	U	0.330	N-Nitroso-di-n-propylamine	0.330	U	0.330
		0.330	U	0.330	Hexachloroethane	0.330	U	0.330
		0.330	U	0.330	Nitrobenzene	0.330	U	0.330
		0.330	U	0.330	Isophorone	0.330	U	0.330
		0.330	U	0.330	2-Nitrophenol	0.330	U	0.330
		0.330	U	0.330	2,4-Dimethylphenol	0.330	U	0.330
		0.330	U	0.330	Benzoic Acid	0.330	U	0.330
		0.330	U	0.330	bis(2-Chloroethoxy)methane	0.330	U	0.330
		0.330	U	0.330	2,4-Dichlorophenol	0.330	U	0.330
		0.330	U	0.330	1,2,4-Trichlorobenzene	0.330	U	0.330
		0.330	U	0.330	Naphthalene	0.330	U	0.330
		0.330	U	0.330	4-Chloroaniline	0.330	U	0.330
		0.330	U	0.330	Hexachlorobutadiene	0.330	U	0.330
		0.330	U	0.330	4-Chloro-3-methylphenol	0.330	U	0.330
		0.330	U	0.330	2-Methylnaphthalene	0.330	U	0.330
		0.330	U	0.330	Hexachlorocyclopentadiene	0.330	U	0.330
		0.330	U	0.330	2,4,6-Trichlorophenol	0.330	U	0.330
		0.825	U	0.825	2,4,5-Trichlorophenol	0.825	U	0.825
		0.330	U	0.330	2-Chloronaphthalene	0.330	U	0.330
		0.825	U	0.825	2-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	Dimethylphthalate	0.330	U	0.330
		0.330	U	0.330	Acenaphthylene	0.330	U	0.330
					2,6-Dinitrotoluene	0.330	U	0.330
					3-Nitroaniline	0.825	U	0.825
					Acenaphthene	0.330	U	0.330
					2,4-Dinitrophenol	0.825	U	0.825
					4-Nitrophenol	0.825	U	0.825
					Dibenzofuran	0.330	U	0.330
					2,4-Dinitrotoluene	0.330	U	0.330
					Diethylphthalate	0.330	U	0.330
					4-Chlorophenyl-phenylether	0.330	U	0.330
					Fluorene	0.330	U	0.330
					4-Nitroaniline	0.825	U	0.825
					4,6-Dinitro-2-methylphenol	0.825	U	0.825
					N-Nitrosodiphenylamine (1)	0.330	U	0.330
					4-Bromophenyl-phenylether	0.330	U	0.330
					Hexachlorobenzene	0.330	U	0.330
					Pentachlorophenol	0.825	U	0.825
					Phenanthrene	0.330	U	0.330
					Anthracene	0.330	U	0.330
					Di-n-butylphthalate	0.330	U	0.330
					Fluoranthene	0.330	U	0.330
					Pyrene	0.330	U	0.330
					Butylbenzylphthalate	0.330	U	0.330
					3,3'-Dichlorobenzidine	0.330	U	0.330
					Benzo(a)anthracene	0.330	U	0.330
					Chrysene	0.330	U	0.330
					bis(2-Ethylhexyl)phthalate	0.330	U	0.330
					Di-n-octylphthalate	0.10	JB	0.330
					Benzo(b)fluoranthene	0.330	U	0.330
					Benzo(k)fluoranthene	0.330	U	0.330
					Benzo(a)pyrene	0.330	U	0.330
					Indeno(1,2,3-cd)pyrene	0.330	U	0.330
					Dibenzo(a,h)anthracene	0.330	U	0.330
					Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1034**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	87	23 - 120
2-Fluorobiphenyl	109	30 - 115
Terphenyl-D14	103	18 - 137
Phenol-D5	82	24 - 113
2-Fluorophenol	83	25 - 121
2,4,6-Tribromophenol	89	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1034  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 92.5925  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.7	N	0.95	7060	11/10/93
Aluminum	13000	N	19	6010	11/12/93
Barium	440	N*	19	6010	11/12/93
Beryllium	0.84		0.46	6010	11/12/93
Cadmium	0.46	U	0.46	6010	11/12/93
Chromium	17		0.93	6010	11/12/93
Copper	8.0		2.3	6010	11/12/93
Iron	12000	N	9.3	6010	11/12/93
Nickel	14		3.7	6010	11/12/93
Lead	5.6	N	0.29	7421	11/10/93
Mercury	0.025	U	0.025	7471	11/10/93
Silver	0.93	U	0.93	6010	11/12/93
Zinc	23		1.9	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1035  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	7.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
trans-1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
cis-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
Chloroform	5	U	5	4-Methyl-2-pentanone	50	U	50
1,2-Dichloroethane	5	U	5	Tetrachloroethene	5	U	5
2-Butanone	3.0	J	100	1,1,2,2-Tetrachloroethane	5	U	5
1,1,1-Trichloroethane	5	U	5	Toluene	5	U	5
Carbon tetrachloride	5	U	5	Chlorobenzene	5	U	5
Vinyl acetate	10	U	10	Ethylbenzene	5	U	5
Dichlorobromomethane	5	U	5	Styrene	5	U	5
				Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	91	88 - 110
BROMOFLUOROBENZENE	95	86 - 115
1,2-DICHLOROETHANE-D4	102	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1036  
SAMPLE DATE: 10/22/93 14:35:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1036  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.9	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.4	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.0	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX

409832-003-01 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1036  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.041	JB 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1036**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	98	30 - 115
Terphenyl-D14	109	18 - 137
Phenol-D5	74	24 - 113
2-Fluorophenol	70	25 - 121
2,4,6-Tribromophenol	90	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1036**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **104.166**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.0	UN	1.0	7060	11/10/93
Aluminum	15000	N	21	6010	11/12/93
Barium	250	N*	21	6010	11/12/93
Beryllium	0.99		0.52	6010	11/12/93
Cadmium	0.81		0.52	6010	11/12/93
Chromium	25		1.0	6010	11/12/93
Copper	9.5		2.6	6010	11/12/93
Iron	11000	N	10	6010	11/12/93
Nickel	100		4.2	6010	11/12/93
Lead	5.2	N	0.30	7421	11/10/93
Mercury	0.024	U	0.024	7471	11/10/93
Silver	1.0	U	1.0	6010	11/12/93
Zinc	28		2.1	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1037  
SAMPLE DATE: 10/22/93 14:40:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1037  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.9	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.4	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	101	74 - 121
1,2-DICHLOROETHANE-D4	110	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1037**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/27/93**  
 ANALYSIS DATE: **11/01/93**  
 DILUTION FACTOR: **0.033**

UNITS:	MG/KG	Reporting			Reportin	
		Result	Qual Limit		Result	Qual Limit
		0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
		0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
		0.330	U 0.330	Acenaphthene	0.330	U 0.330
		0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
		0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
		0.330	U 0.330	Dibenzofuran	0.330	U 0.330
		0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
		0.330	U 0.330	Diethylphthalate	0.330	U 0.330
		0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
		0.330	U 0.330	Fluorene	0.330	U 0.330
		0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
		0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
		0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
		0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
		0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
		0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
		0.330	U 0.330	Phenanthrene	0.330	U 0.330
		0.330	U 0.330	Anthracene	0.330	U 0.330
		0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
		0.330	U 0.330	Fluoranthene	0.330	U 0.330
		0.330	U 0.330	Pyrene	0.330	U 0.330
		0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
		0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
		0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
		0.330	U 0.330	Chrysene	0.330	U 0.330
		0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
		0.330	U 0.330	Di-n-octylphthalate	0.073	JB 0.330
		0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
		0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
		0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
		0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
		0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
		0.330	U 0.330	Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1037  
SAMPLE DATE: 10/22/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	97	30 - 115
Terphenyl-D14	100	18 - 137
Phenol-D5	76	24 - 113
2-Fluorophenol	76	25 - 121
2,4,6-Tribromophenol	81	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1037**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **109.890**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.0	N	1.0	7060	11/10/93
Aluminum	16000	N	22	6010	11/12/93
Barium	160	N*	22	6010	11/12/93
Beryllium	0.99		0.55	6010	11/12/93
Cadmium	0.77		0.55	6010	11/12/93
Chromium	21		1.1	6010	11/12/93
Copper	7.1		2.7	6010	11/12/93
Iron	16000	N	11	6010	11/12/93
Nickel	19		4.4	6010	11/12/93
Lead	5.7	N	0.31	7421	11/10/93
Mercury	0.027	U	0.027	7471	11/10/93
Silver	1.1	U	1.1	6010	11/12/93
Zinc	26		2.2	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1038  
SAMPLE DATE: 10/22/93 14:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1038  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	0.6	J	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.6	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.1	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	0.6	J	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

**Data Qualifier Key:**  
 U - none detected  
 J - estimated value (less than the sample quantitation limit)  
 B - analyte is found in the associated blank as well as in the sample  
 'blank' - positive result  
 \* - Surrogate recovery is outside QC limit  
 D - compound identified at a secondary dilution factor  
 E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: ABM HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1038  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting Qual	Limit		Result	Reporting Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
1-Chlorophenol	0.330	U	0.330	Fluorene	0.330	U	0.330
Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
1,1-Dichloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
1-Chlorobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Chloroform	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
1-Chlorophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
1-Chlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	Pyrene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
1,4-Dichlorobenzene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
2-Chlorophenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	Chrysene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
1,4-Dichlorobenzene	0.330	U	0.330	Di-n-octylphthalate	0.089	JB	0.330
2-Chlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	Benzo(a)pyrene	0.330	U	0.330
1,4-Dichlorobenzene	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
2-Chlorophenol	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	Benzo(g,h,i)perylene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330				
1,4-Dichlorobenzene	0.330	U	0.330				

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1038**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	72	23 - 120
2-Fluorobiphenyl	93	30 - 115
Terphenyl-D14	107	18 - 137
Phenol-D5	71	24 - 113
2-Fluorophenol	69	25 - 121
2,4,6-Tribromophenol	87	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1038  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 83.3333  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.3	N	1.0	7060	11/10/93
Aluminum	10000	N	17	6010	11/12/93
Barium	250	N*	17	6010	11/12/93
Beryllium	0.81		0.42	6010	11/12/93
Cadmium	0.42	U	0.42	6010	11/12/93
Chromium	15		0.83	6010	11/12/93
Copper	7.5		2.1	6010	11/12/93
Iron	12000	N	8.3	6010	11/12/93
Nickel	13		3.3	6010	11/12/93
Lead	4.4	N	0.30	7421	11/10/93
Mercury	0.021	U	0.021	7471	11/10/93
Silver	0.83	U	0.83	6010	11/12/93
Zinc	21		1.7	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

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SAMPLE ID: A1039  
SAMPLE DATE: 10/22/93 14:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1039  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.7	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	5.7	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	106	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:  
 U - none detected  
 J - estimated value (less than the sample quantitation limit)  
 B - analyte is found in the associated blank as well as in the sample  
 'blank' - positive result  
 \* - Surrogate recovery is outside QC limit  
 D - compound identified at a secondary dilution factor  
 E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1039  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
1-Methylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.072	JB 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1039**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	97	30 - 115
Terphenyl-D14	103	18 - 137
Phenol-D5	73	24 - 113
2-Fluorophenol	72	25 - 121
2,4,6-Tribromophenol	87	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1039**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **102.040**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.5	N	1.1	7060	11/10/93
Aluminum	11000	N	20	6010	11/12/93
Barium	130	N*	20	6010	11/12/93
Beryllium	0.84		0.51	6010	11/12/93
Cadmium	0.51	U	0.51	6010	11/12/93
Chromium	15		1.0	6010	11/12/93
Copper	7.1		2.6	6010	11/12/93
Iron	12000	N	10	6010	11/12/93
Nickel	13		4.1	6010	11/12/93
Lead	3.9	N	0.33	7421	11/10/93
Mercury	0.025	U	0.025	7471	11/10/93
Silver	1.0	U	1.0	6010	11/12/93
Zinc	21		2.0	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

SAMPLE ID: A1040  
SAMPLE DATE: 10/22/93 15:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1040  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	1.7	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	1.5	J	5	2-Chloroethylvinyl ether	10	U	10
1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	107	81 - 117
BROMOFLUOROBENZENE	102	74 - 121
1,2-DICHLOROETHANE-D4	109	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1040  
 SAMPLE DATE: 10/22/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting			Result	Reporting	
		Qual	Limit			Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.11	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-297

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1040**  
SAMPLE DATE: **10/22/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	94	30 - 115
Terphenyl-D14	106	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	74	25 - 121
2,4,6-Tribromophenol	93	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1040**  
 SAMPLE DATE: **10/22/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **94.3396**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.0	N	0.91	7060	11/10/93
Aluminum	16000	N	19	6010	11/12/93
Barium	1000	N*	19	6010	11/12/93
Beryllium	0.99		0.47	6010	11/12/93
Cadmium	0.47	U	0.47	6010	11/12/93
Chromium	21		0.94	6010	11/12/93
Copper	7.8		2.4	6010	11/12/93
Iron	15000	N	9.4	6010	11/12/93
Nickel	16		3.8	6010	11/12/93
Lead	5.6	N	0.27	7421	11/10/93
Mercury	0.025	U	0.025	7471	11/10/93
Silver	0.94	U	0.94	6010	11/12/93
Zinc	24		1.9	6010	11/12/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297

409832-003-01

SAMPLE ID: LAB BLANK  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Ref</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
				<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI			0.010U	0.010	MG/KG	11/03/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: KPA8240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	11		10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	88 - 110
BROMOFLUOROBENZENE	95	86 - 115
1,2-DICHLOROETHANE-D4	101	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297

409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/27/93  
 ANALYSIS DATE: 10/29/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.12	J 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK**  
SAMPLE DATE: **not spec**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	85	23 - 120
2-Fluorobiphenyl	101	30 - 115
Terphenyl-D14	111	18 - 137
Phenol-D5	84	24 - 113
2-Fluorophenol	79	25 - 121
2,4,6-Tribromophenol	78	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/10/93
Aluminum	0.20	U	0.20	6010	11/12/93
Barium	0.20	U	0.20	6010	11/12/93
Beryllium	0.0050	U	0.0050	6010	11/12/93
Cadmium	0.0050	U	0.0050	6010	11/12/93
Chromium	0.010	U	0.010	6010	11/12/93
Copper	0.025	U	0.025	6010	11/12/93
Iron	0.10	U	0.10	6010	11/12/93
Nickel	0.040	U	0.040	6010	11/12/93
Lead	0.0030	U	0.0030	7421	11/10/93
Mercury	0.00020	U	0.00020	7471	11/10/93
Silver	0.010	U	0.010	6010	11/12/93
Zinc	0.020	U	0.020	6010	11/12/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK#2  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.7	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.2	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.6	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-297  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK#3  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropane	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.0	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	99	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-297

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK#4  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	0.5	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.2	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.4	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	103	74 - 121
1,2-DICHLOROETHANE-D4	107	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297

409832-003-01

SAMPLE ID: LAB BLANK  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010 MG/KG	11/04/93	EPA7196

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297  
409832-003-01

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME Hazardous Substance Vols.

TEST CODE 8240TK

Hazardous Substance Method 8240, SW-846, Test Methods for Evaluating Solid List Volatiles Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME ABN HSL GC/MS Extractables

TEST CODE 8270TK

Hazardous Substance Method 8270, SW-846, Test Methods for Evaluating Solid List Extractables Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME Arsenic - Graphite Furnace

TEST CODE AS\_GF

Arsenic Method 7060, SW-846, Test Methods for Evaluating Solid Graphite Wastes, Third Edition. EPA 206.2-Technical Additions Furnace to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME Chromium VI

TEST CODE CR\_VI

Chromium VI Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

TEST NAME Mercury

TEST CODE HG\_AA

Mercury Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-297

409832-003-01

TEST NAME Mercury

TEST CODE HG\_AA

Method 245.5-"Technical Additions to Methods for  
Chemical Analysis of Water and Wastes,"  
EPA-600/4-82-055, December 1982.

TEST NAME Metals

TEST CODE ICPTK2

Method not available.

TEST NAME Lead - Graphite Furnace

TEST CODE PB\_GF

Lead

Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical  
Analysis of Water and Wastes," EPA-600/4-82-055,  
December 1982.

TEST NAME GFAA Digestion - Soil

TEST CODE Z3050F

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
Graphite Furnace/Flame AA analysis.

TEST NAME ICPEs Digestion - Soil

TEST CODE Z3050P

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
ICPEs analysis. Equivalent to Method 3050A, SW-846  
Update I, July 1992.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document 313513  
Page 1 of 3

Project Name/No. 1 ITAPB-5201 409832.03.01  
 Sample Team Members: 2 Andrew Gordon  
Kyle Kirschbaum  
 Profit Center No. 3 3527  
 Project Manager 4 Jimmy Taylor  
 Purchase Order No. 6 409832.03-5201  
 Required Report Date 11 15 Days

Samples Shipment Date 7 10-22-93  
 Lab Destination 8 ITAS-AUSTIN  
 Lab Contact 9 Karmen Deaize  
 Project Contact/Phone 12 OWN MIC GREGOR  
405-736-2260  
 Carrier/Waybill No. 13 8460755505  
 Report to: 10 TIM JENNINGS  
IT-AUSTIN-ES

## ONE CONTAINER PER LINE

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-19 preservative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1022	Soil	10-22-93	clear glass	125	COOL	8270	Good loc	
A1023		0740		500		8270, 6010/7000	See Receipts	
A1023		10-22-93		125		8270	See Receipts	
A1024	Water	0745		500		8270, 6010/7000	See Receipts	
A1025	Soil	10-19-93		40ml	HCL COOL	8270	See Receipts	
A1025		1700		125	COOL	8270	See Receipts	
A1025		10-22-93		500		8270, 6010/7000	See Receipts	

Special Instructions: 23  
 Possible Hazard Identification: 24  
 Non-hazard  Flammable  Skin Irritant  Poison B  Unknown   
 Turnaround Time Required: 26  
 Normal  Rush   
 QC Level: 27  
 I  II  III

Sample Disposal: 25  
 Return to Client  Disposal by Lab  Archive

1. Relinquished by 28  
 (Signature/Affiliation) [Signature] Date: 10-22-93 Time: 1730  
 2. Relinquished by  
 (Signature/Affiliation) [Signature] Date: 10-23-93 Time: 0930  
 3. Relinquished by  
 (Signature/Affiliation) [Signature] Date: 10-23-93 Time: 0930

Comments: 29



**ANALYSIS K QUEST AND CHAIN OF CUSTODY RECORD (cont.)\***

8310297

Reference Document No. 313513  
Page 2 of 3

Project Name 7AFB-5001

Project No. 409837.03.01 D.O. 500 Samples Shipment Date 10-22-93

White: To accompany samples

Yellow: Field copy

\*See back of form for special instructions.

**ONE CONTAINER PER LINE**

Sample <sup>14</sup> Number	Sample <sup>15</sup> Description/Type	Date/Time <sup>16</sup> Collected	Container <sup>17</sup> Type	Sample <sup>18</sup> Volume	Pre-19 <sup>19</sup> preservative	Requested Testing <sup>20</sup> Program	Condition on 21 <sup>21</sup> Receipt	Disposal 22 <sup>22</sup> Record No.
A1026	Soil	10-22-93 0800	Flytoss	125	COOL	8240	Good 1°C	
A1026		10-22-93 0800		500		8270, 600/700	See RVRs	
A1027		10-22-93 0945		125		8240	Th 10/23/93	
A1027		10-22-93 0945		500		8270, 600/700		
A1028 (MSD)		10-22-93 0955		125		8240		
A1028 (MSD)		10-22-93 0955		1000		8270, 600/700		
A1029		10-22-93 1000		125		8240		
A1029		10-22-93 1000		500		8270, 600/700		
A1030		10-22-93 1010		125		8240		
A1030		10-22-93 1010		500		8270, 600/700		
A1031		10-22-93 1305		125		8240		
A1031		10-22-93 1305		500		8270, 600/700		
A1032		10-22-93 1310		125		8240		
A1032		10-22-93 1310		500		8270, 600/700		
A1033		10-22-93 1320		125		8240		
A1033		10-22-93 1320		500		8270, 600/700		
A1034		10-22-93 1325		125		8240		
A1034		10-22-93 1325		500		8270, 600/700		
A1035	Water	10-22-93 1700		40ml	HEX COOL	8240		B 3244/00A



Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1022

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
01B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	103
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	108
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	103

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1023

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	105
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	110
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	105

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1025

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	105
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	110HGAA2	11/10/93	11/10/93	118
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	105

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1026

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	98
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	101
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	98

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1027

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
06B						
	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	102
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	116
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	408

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1028

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07B						
	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	108
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	120
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	108

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1028-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B						
	Arsenic	B310297-22B	11093050F1	11/09/93		112
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	114
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	112

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1028-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
09B	Arsenic	B310297-22B	11093050F1	11/09/93		104
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	114
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	104

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1029

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	102
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	118
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	102

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1030

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
11B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	98
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	122
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	98

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1031

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
12B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	105
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	123
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	105

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1032

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
13B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	118
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	102
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	118

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1033

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
14B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	94.3
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	127
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	94.3

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1034

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
15B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	95.2
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	50.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	127
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	95.2

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1036

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
17B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	101
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	123
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	101

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1037

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
18B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	103
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	10.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	135
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	103

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1038

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
19B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	100
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	50.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	106
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	100

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1039

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
20B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	109
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	50.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	127
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	109

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : A1040

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
21B	Arsenic	B310297-22B	11093050F1	11/09/93		90.9
	Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	50.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	123
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	90.9

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : LAB BLANK

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
22B	Arsenic	B310297-22B	11093050F1	11/09/93	11/10/93	1.0
	Chromium VI	B310297-22B	1103CR_VI1	11/03/93	11/03/93	1.0
	Mercury	B310297-22B	1110HGAA2	11/10/93	11/10/93	1.0
	Lead	B310297-22B	11093050F1	11/09/93	11/10/93	1.0

Auxiliary Data Summary

12/03/93

Work order : B310297

Sample ID : LAB BLANK

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
	26A Chromium VI	B310297-26A	1104CR_VI1	11/04/93	11/04/93	1.0

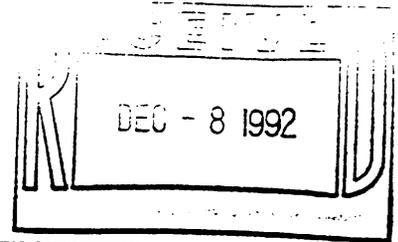


TPJ

Routed to K.H. CF. TL 12/9/93



# ANALYTICAL SERVICES



## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/04/93

Work Order: B3-10-293

This is the Certificate of Analysis for the following samples:

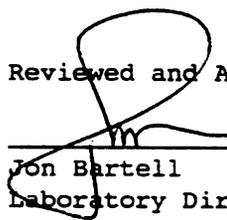
Client Work ID: D.O. 5001	409832-003-01
Date Received: 10/21/93	
Number of Samples: 15	
Sample Type: SOIL	

I. Introduction  
Revised report. Previously reported on 12/01/93.  
First Reported on 12/01/93.

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1004	B3-10-293-01
A1005	B3-10-293-02
A1006	B3-10-293-03
A1007	B3-10-293-04
A1008	B3-10-293-05
A1009	B3-10-293-06
A1010	B3-10-293-07
A1011	B3-10-293-08
A1012	B3-10-293-09
LAB BLANK #1	B3-10-293-10
LAB BLANK #2	B3-10-293-11

Reviewed and Approved:



Jon Bartell  
Laboratory Director

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories  
American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
LAB BLANK #3	B3-10-293-12
LAB BLANK #1	B3-10-293-13
A1006-MS	B3-10-293-14
A1006-MSD	B3-10-293-15

## II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

## III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

---

SAMPLE ID: A1004  
SAMPLE DATE: 10/20/93 09:30:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1004  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	7.5	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	30	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	7.6	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	7.5		5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	105	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	101	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1004  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting				Reporting		
			Result	Qual	Limit		Result	Qual	Limit
Phenol			0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl) ether			0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol			0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene			0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol			0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol			0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl) ether			0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
4-Methylphenol			0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine			0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane			0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene			0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone			0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol			0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol			0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid			0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane			0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol			0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene			0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene			0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline			0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene			0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol			0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene			0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene			0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol			0.330	U	0.330	Di-n-octylphthalate	0.14	JB	0.330
2,4,5-Trichlorophenol			0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene			0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline			0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate			0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene			0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
						Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1004  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	73	23 - 120
2-Fluorobiphenyl	78	30 - 115
Terphenyl-D14	92	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	59	25 - 121
2,4,6-Tribromophenol	96	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: Metals  
METHOD REFERENCE: EPA6010

SAMPLE ID: A1004  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL  
DILUTION FACTOR (6010): 107.526  
UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.3		0.95	7060	11/08/93
Aluminum	16000		22	6010	11/09/93
Barium	100	N	22	6010	11/09/93
Beryllium	0.74		0.54	6010	11/09/93
Cadmium	0.54	U	0.54	6010	11/09/93
Chromium	17	*	1.1	6010	11/09/93
Copper	7.3	*	2.7	6010	11/09/93
Iron	12000	*	11	6010	11/09/93
Nickel	15	*	4.3	6010	11/09/93
Lead	6.0	N	0.29	7421	11/09/93
Mercury	0.021	U	0.021	7471	11/07/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	24		2.2	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

---

SAMPLE ID: A1005  
SAMPLE DATE: 10/20/93 09:45:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1005  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	9.6	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank'
- positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1005  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporti:	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
1-Methylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1005**  
SAMPLE DATE: **10/20/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	78	23 - 120
2-Fluorobiphenyl	81	30 - 115
Terphenyl-D14	93	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	62	25 - 121
2,4,6-Tribromophenol	103	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1005  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 95.2380  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.7		1.1	7060	11/08/93
Aluminum	11000		19	6010	11/09/93
Barium	68	N	19	6010	11/09/93
Beryllium	0.66		0.48	6010	11/09/93
Cadmium	0.48	U	0.48	6010	11/09/93
Chromium	16	*	0.95	6010	11/09/93
Copper	7.6	*	2.4	6010	11/09/93
Iron	14000	*	9.5	6010	11/09/93
Nickel	16	*	3.8	6010	11/09/93
Lead	5.1	N	0.32	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	0.95	U	0.95	6010	11/09/93
Zinc	22		1.9	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

SAMPLE ID: A1006  
SAMPLE DATE: 10/20/93 10:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1006  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	11	B	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.7	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	1.2	J	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.8	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: KPA8270

SAMPLE ID: A1006  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting				MG/KG	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol			0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330	
bis(2-Chloroethyl)ether			0.330	U	0.330	3-Nitroaniline	0.825	U	0.825	
2-Chlorophenol			0.330	U	0.330	Acenaphthene	0.330	U	0.330	
1,3-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825	
1,4-Dichlorobenzene			0.330	U	0.330	4-Nitrophenol	0.825	U	0.825	
Benzyl alcohol			0.330	U	0.330	Dibenzofuran	0.330	U	0.330	
1,2-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330	
2-Methylphenol			0.330	U	0.330	Diethylphthalate	0.330	U	0.330	
bis(2-Chloroisopropyl)ether			0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330	
ethylphenol			0.330	U	0.330	Fluorene	0.330	U	0.330	
N-Nitroso-di-n-propylamine			0.330	U	0.330	4-Nitroaniline	0.825	U	0.825	
Hexachloroethane			0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825	
Nitrobenzene			0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330	
Isophorone			0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330	
2-Nitrophenol			0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330	
2,4-Dimethylphenol			0.330	U	0.330	Pentachlorophenol	0.825	U	0.825	
Benzoic Acid			0.330	U	0.330	Phenanthrene	0.330	U	0.330	
bis(2-Chloroethoxy)methane			0.330	U	0.330	Anthracene	0.330	U	0.330	
2,4-Dichlorophenol			0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330	
1,2,4-Trichlorobenzene			0.330	U	0.330	Fluoranthene	0.330	U	0.330	
Naphthalene			0.330	U	0.330	Pyrene	0.330	U	0.330	
4-Chloroaniline			0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330	
Hexachlorobutadiene			0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330	
4-Chloro-3-methylphenol			0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330	
2-Methylnaphthalene			0.330	U	0.330	Chrysene	0.330	U	0.330	
Hexachlorocyclopentadiene			0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330	
2,4,6-Trichlorophenol			0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330	
2,4,5-Trichlorophenol			0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330	
2-Chloronaphthalene			0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330	
2-Nitroaniline			0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330	
Dimethylphthalate			0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330	
Acenaphthylene			0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330	
						Benzo(g,h,i)perylene	0.330	U	0.330	

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1006  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	63	23 - 120
2-Fluorobiphenyl	69	30 - 115
Terphenyl-D14	74	18 - 137
Phenol-D5	58	24 - 113
2-Fluorophenol	59	25 - 121
2,4,6-Tribromophenol	68	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: E3-10-293  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1006**  
 SAMPLE DATE: **10/20/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **107.526**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.8		1.1	7060	11/08/93
Aluminum	11000		22	6010	11/09/93
Barium	510	N	22	6010	11/09/93
Beryllium	0.60		0.54	6010	11/09/93
Cadmium	0.54	U	0.54	6010	11/09/93
Chromium	15	*	1.1	6010	11/09/93
Copper	7.9	*	2.7	6010	11/09/93
Iron	13000	*	11	6010	11/09/93
Nickel	12	*	4.3	6010	11/09/93
Lead	6.0	N	0.33	7421	11/09/93
Mercury	0.025	U	0.025	7471	11/07/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	19		2.2	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

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SAMPLE ID: A1007  
SAMPLE DATE: 10/20/93 10:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1007  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	9.8	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	12	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.7	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	0.7	J	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	98	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1007  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting			Reporting	
			Result	Qual Limit		Result	Qual Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol		0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene		0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
					Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1007**  
SAMPLE DATE: **10/20/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	59	23 - 120
2-Fluorobiphenyl	68	30 - 115
Terphenyl-D14	75	18 - 137
Phenol-D5	56	24 - 113
2-Fluorophenol	56	25 - 121
2,4,6-Tribromophenol	66	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1007  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 108.695  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	10		4.4	7060	11/08/93
Aluminum	8500		22	6010	11/09/93
Barium	790	N	22	6010	11/09/93
Beryllium	0.54	U	0.54	6010	11/09/93
Cadmium	0.54	U	0.54	6010	11/09/93
Chromium	19	*	1.1	6010	11/09/93
Copper	6.9	*	2.7	6010	11/09/93
Iron	11000	*	11	6010	11/09/93
Nickel	14	*	4.3	6010	11/09/93
Lead	6.9	N	0.33	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	16		2.2	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
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409832-003-01 Work Order: B3-10-293

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SAMPLE ID: A1008  
SAMPLE DATE: 10/20/93 13:20:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1008  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.4	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	32	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	6.9	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1008  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting		
	Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
1,4-Dimethylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.11	JB 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPAS270**

SAMPLE ID: **A1008**  
SAMPLE DATE: **10/20/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	76	23 - 120
2-Fluorobiphenyl	79	30 - 115
Terphenyl-D14	94	18 - 137
Phenol-D5	70	24 - 113
2-Fluorophenol	62	25 - 121
2,4,6-Tribromophenol	99	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1008  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 91.7431  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.6		1.1	7060	11/08/93
Aluminum	18000		18	6010	11/09/93
Barium	320	N	18	6010	11/09/93
Beryllium	0.82		0.46	6010	11/09/93
Cadmium	0.60		0.46	6010	11/09/93
Chromium	16	*	0.92	6010	11/09/93
Copper	8.6	*	2.3	6010	11/09/93
Iron	14000	*	9.2	6010	11/09/93
Nickel	13	*	3.7	6010	11/09/93
Lead	8.7	N	0.63	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	0.92	U	0.92	6010	11/09/93
Zinc	27		1.8	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Referenced notes for these results:

Barium matrix spike duplicate and % RPD for matrix spikes outside control limits due to matrix interference. LCS / LCSD results and method Quality Control were acceptable.

Duplicate analysis outside control limits for chromium, copper, iron and nickel analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

SAMPLE ID: A1009  
SAMPLE DATE: 10/20/93 13:30:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1009  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	6.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1009**  
 SAMPLE DATE: **10/20/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **10/28/93**  
 ANALYSIS DATE: **11/05/93**  
 DILUTION FACTOR: **0.033**

UNITS:	MG/KG	Reporting				Reporting		
		Result	Qual	Limit		Result	Qual	Limit
		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
		0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	Acenaphthene	0.330	U	0.330
		0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
		0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
		0.330	U	0.330	Dibenzofuran	0.330	U	0.330
		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
		0.330	U	0.330	Diethylphthalate	0.330	U	0.330
		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Fluorene	0.330	U	0.330
		0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
		0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
		0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
		0.330	U	0.330	Phenanthrene	0.330	U	0.330
		0.330	U	0.330	Anthracene	0.330	U	0.330
		0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
		0.330	U	0.330	Fluoranthene	0.330	U	0.330
		0.330	U	0.330	Pyrene	0.330	U	0.330
		0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
		0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
		0.330	U	0.330	Chrysene	0.330	U	0.330
		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
		0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
		0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
		0.330	U	0.330	Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1009**  
SAMPLE DATE: **10/20/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	67	23 - 120
2-Fluorobiphenyl	74	30 - 115
Terphenyl-D14	80	18 - 137
Phenol-D5	61	24 - 113
2-Fluorophenol	59	25 - 121
2,4,6-Tribromophenol	73	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1009**  
 SAMPLE DATE: **10/20/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **109.890**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.1	U	1.1	7060	11/08/93
Aluminum	13000		22	6010	11/09/93
Barium	1100	N	22	6010	11/09/93
Beryllium	0.91		0.55	6010	11/09/93
Cadmium	0.55	U	0.55	6010	11/09/93
Chromium	19	*	1.1	6010	11/09/93
Copper	9.6	*	2.7	6010	11/09/93
Iron	17000	*	11	6010	11/09/93
Nickel	20	*	4.4	6010	11/09/93
Lead	7.4	N	0.32	7421	11/09/93
Mercury	0.020	U	0.020	7471	11/07/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	23		2.2	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

SAMPLE ID: A1010  
SAMPLE DATE: 10/20/93 13:40:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1010  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.7	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1010  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG			Reporting			Reporting		
	Result	Qual	Limit	Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330		
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825		
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330		
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825		
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825		
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330		
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330		
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330		
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330		
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330		
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825		
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825		
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330		
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330		
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330		
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825		
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330		
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330		
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330		
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330		
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330		
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330		
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330		
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330		
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330		
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330		
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330		
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330		
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330		
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330		
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330		
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330		
				Benzo(g,h,i)perylene	0.330	U	0.330		

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1010  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	61	23 - 120
2-Fluorobiphenyl	63	30 - 115
Terphenyl-D14	68	18 - 137
Phenol-D5	53	24 - 113
2-Fluorophenol	54	25 - 121
2,4,6-Tribromophenol	65	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1010**  
 SAMPLE DATE: **10/20/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **109.890**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.2		1.1	7060	11/08/93
Aluminum	11000		22	6010	11/09/93
Barium	260	N	22	6010	11/09/93
Beryllium	0.61		0.55	6010	11/09/93
Cadmium	0.55	U	0.55	6010	11/09/93
Chromium	14	*	1.1	6010	11/09/93
Copper	7.3	*	2.7	6010	11/09/93
Iron	10000	*	11	6010	11/09/93
Nickel	14	*	4.4	6010	11/09/93
Lead	6.2	N	0.34	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/07/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	22		2.2	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-293

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SAMPLE ID: A1011  
SAMPLE DATE: 10/20/93 14:10:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1011  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.7	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	17	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	8.3	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1011  
 SAMPLE DATE: 10/20/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.11	JB	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1011  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	53	23 - 120
2-Fluorobiphenyl	59	30 - 115
Terphenyl-D14	60	18 - 137
Phenol-D5	49	24 - 113
2-Fluorophenol	48	25 - 121
2,4,6-Tribromophenol	55	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1011**  
 SAMPLE DATE: **10/20/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **97.0873**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.7		0.91	7060	11/08/93
Aluminum	12000		19	6010	11/09/93
Barium	520	N	19	6010	11/09/93
Beryllium	0.60		0.49	6010	11/09/93
Cadmium	0.53		0.49	6010	11/09/93
Chromium	14	*	0.97	6010	11/09/93
Copper	8.3	*	2.4	6010	11/09/93
Iron	13000	*	9.7	6010	11/09/93
Nickel	.14	*	3.9	6010	11/09/93
Lead	7.6	N	0.55	7421	11/09/93
Mercury	0.022	U	0.022	7471	11/07/93
Silver	0.97	U	0.97	6010	11/09/93
Zinc	21		1.9	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1012  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	7.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	91	88 - 110
BROMOFLUOROBENZENE	90	86 - 115
1,2-DICHLOROETHANE-D4	96	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

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SAMPLE ID: LAB BLANK #1  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.5	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	3.7	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	101	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U 0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U 0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U 0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U 0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U 0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U 0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U 0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U 0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U 0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U 0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U 0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U 0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U 0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U 0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U 0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U 0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U 0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U 0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U 0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U 0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U 0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U 0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U 0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U 0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U 0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U 0.330	Di-n-octylphthalate	0.14	J 0.330
2,4,5-Trichlorophenol	0.825	U 0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U 0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U 0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U 0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U 0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
			Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK #1**  
SAMPLE DATE: **not spec**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	82	23 - 120
2-Fluorobiphenyl	83	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	68	24 - 113
2-Fluorophenol	67	25 - 121
2,4,6-Tribromophenol	77	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/08/93
Aluminum	0.20	U	0.20	6010	11/09/93
Barium	0.20	U	0.20	6010	11/09/93
Beryllium	0.0050	U	0.0050	6010	11/09/93
Cadmium	0.0050	U	0.0050	6010	11/09/93
Chromium	0.011	U	0.010	6010	11/09/93
Copper	0.025	U	0.025	6010	11/09/93
Iron	0.10	U	0.10	6010	11/09/93
Nickel	0.040	U	0.040	6010	11/09/93
Lead	0.0030	U	0.0030	7421	11/09/93
Mercury	0.00020	U	0.00020	7471	11/07/93
Silver	0.010	U	0.010	6010	11/09/93
Zinc	0.020	U	0.020	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Referenced notes for these results:

Chromium concentration in prep blank for ICPES analysis at 11 ppb, slightly above the PQL of 10 ppb.

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #2  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	2.2	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	3.3	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	99	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-293  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #3  
 SAMPLE DATE:  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/03/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.1	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	102	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE:  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 10/31/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	11		10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	88 - 110
BROMOFLUOROBENZENE	95	86 - 115
1,2-DICHLOROETHANE-D4	101	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1006-MS  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/02/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	100	Trichloroethene	94
		Benzene	106
		Toluene	113
		Chlorobenzene	113

Surrogates	% Recovery	Limits
TOLUENE-D8	107	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1006-MSD  
SAMPLE DATE: 10/20/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/02/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	103	Trichloroethene	93
		Benzene	111
		Toluene	116
		Chlorobenzene	113

Surrogates	% Recovery	Limits
TOLUENE-D8	108	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	106	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-293  
409832-003-01

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME Hazardous Substance Vols.

TEST CODE 8240TK

Hazardous Substance List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME ABW HSL GC/MS Extractables

TEST CODE 8270TK

Hazardous Substance List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME Arsenic - Graphite Furnace

TEST CODE AS\_GF

Arsenic Graphite Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME Chromium VI

TEST CODE CR\_VI

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

TEST NAME Mercury

TEST CODE HG\_AA

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-293

TEST NAME Mercury

TEST CODE HG\_AA

Method 245.5-"Technical Additions to Methods for  
Chemical Analysis of Water and Wastes,"  
EPA-600/4-82-055, December 1982.

TEST NAME Metals

TEST CODE ICPTK2

Method not available.

TEST NAME Lead - Graphite Furnace

TEST CODE PB\_GF

Lead  
Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical  
Analysis of Water and Wastes," EPA-600/4-82-055,  
December 1982.

TEST NAME GFAA Digestion - Soil

TEST CODE Z3050F

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
Graphite Furnace/Flame AA analysis.

TEST NAME ICPEs Digestion - Soil

TEST CODE Z3050P

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
ICPEs analysis. Equivalent to Method 3050A, SW-846  
Update I, July 1992.



INTERNATIONAL  
ANALYTICAL  
CORPORATION

**ANALYSIS REFERENCE DOCUMENT  
CHAIN OF CUSTODY RECORD\***

3310293

Reference Document #  
Page 1 of 2

420749

4098303.01

Project Name/No. 1 THFB-500

Samples Shipment Date 7 10-20-93

Bill to: 5 409832-03.01

Sample Team Members 2 ACG/KLK

Lab Destination 8 THAS-AUSTIN

P.O. 6001

Profit Center No. 3 3527

Lab Contact 9 Kaymen Deane

Project Manager 4 Jimmy Taylor

Project Contact/Phone 12 Don McGregor

Report to: 10 Tim Jennings

Purchase Order No. 6 ---

Carrier/Waybill No. 13 FX 8460755461

IT-Austin-ES

Required Report Date 11 15 days

**ONE CONTAINER PER LINE**

Sample Number	Sample 14 Description/Type	Sample 15 Date/Time Collected	Sample 16 Container Type	Sample 17 Volume	Sample 18 Pre-servative	Sample 19 Requested Testing Program	Sample 20 Condition on Receipt	Sample 21 Disposal Record No.
A1004	Soil	10-20-93 0930	clear glass	125ml	COOL	8240	(w) 10/11/93	
A1004	Soil	10-20-93 0930	"	500ml	COOL	8270/6000		
A1005		10-20-93 0945		125		8240		
A1005		10-20-93 0945		500		8270/6000		
A1006		10-20-93 1000		125		8240		
A1006		10-20-93 1000		500		8270/6000		
A1007		10-20-93 1010		125		8240		
A1007		10-20-93 1010		500		8270/6000		

Special Instructions: 23

Possible Hazard Identification: 24

Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal: 25

Return to Client  Disposal by Lab  Archive  (mos.)

Turnaround Time Required: 26

Normal  Rush

QC Level: 27

I.  II.  III.  Project Specific (specify):

1. Relinquished by 28 Kyle Taylor (IT)

Date: 10-20-93  
Time: 1700

1. Received by 28 [Signature]

Date: 10/11/93  
Time: 0712

2. Relinquished by (Signature/Affiliation)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

2. Received by (Signature/Affiliation)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

3. Relinquished by (Signature/Affiliation)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

3. Received by (Signature/Affiliation)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Comments: 29



## Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1004

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
01B						
	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	95
	Cromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	106
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	95

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1005

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	105
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	116
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	105

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1006

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	110
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	127
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	110

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1007

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B	3550MS				10/29/93	
	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	435
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	HG_AA	B310393-10B	1107HGAAA1	11/07/93	11/07/93	112
	PB_GF	B310393-10B	11043050F1	11/04/93	11/09/93	109

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1008

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	105
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	115
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	210

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1009

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
	06B					
	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	105
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	101
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	105

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1010

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	112
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	116
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	112

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : A1011

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	90.9
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	10.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	109
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	182

Auxiliary Data Summary

12/02/93

Work order : B310293

Sample ID : LAB BLANK #1

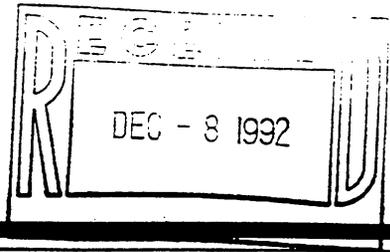
FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B	Arsenic	B310393-10B	11043050F1	11/04/93	11/08/93	1.0
	Chromium VI	B310293-10B	1102CRVI1	11/02/93	11/02/93	1.0
	Mercury	B310393-10B	1107HGAA1	11/07/93	11/07/93	1.0
	Lead	B310393-10B	11043050F1	11/04/93	11/09/93	1.0

TPJ

Routed to KH, CF, TL 12/9/93



# ANALYTICAL SERVICES



## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/04/93

Work Order: B3-10-245

This is the Certificate of Analysis for the following samples:

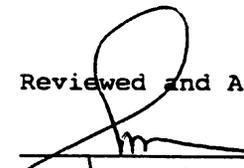
Client Work ID: D.O.5001	409832-003-01
Date Received: 10/20/93	
Number of Samples: 4	
Sample Type: SOIL	

### I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1001	B3-10-245-01
A1002	B3-10-245-02
A1003	B3-10-245-03
LAB BLANK	B3-10-245-04

Reviewed and Approved:




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Jon Bartell  
Laboratory Director

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories  
American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-245

---

## II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

## III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-245

---

SAMPLE ID: A1001  
SAMPLE DATE: 10/19/93 14:50:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1001  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	13	B	10	1,1,2-Trichloroethane	5	U	5
Acetone	15	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.2	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	101	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1001  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 0.033

UNITS:	MG/KG	Reporting	Reporting
	Result	Qual	Limit
Phenol	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330
2-Chlorophenol	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330
1,4-Dichlorobenzene	0.330	U	0.330
Benzyl alcohol	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330
ethylphenol	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330
Hexachloroethane	0.330	U	0.330
Nitrobenzene	0.330	U	0.330
Isophorone	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330
Benzoic Acid	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330
Naphthalene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825
2-Chloronaphthalene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825
Dimethylphthalate	0.330	U	0.330
Acenaphthylene	0.330	U	0.330
2,6-Dinitrotoluene	0.330	U	0.330
3-Nitroaniline	0.825	U	0.825
Acenaphthene	0.330	U	0.330
2,4-Dinitrophenol	0.825	U	0.825
4-Nitrophenol	0.825	U	0.825
Dibenzofuran	0.330	U	0.330
2,4-Dinitrotoluene	0.330	U	0.330
Diethylphthalate	0.330	U	0.330
4-Chlorophenyl-phenylether	0.330	U	0.330
Fluorene	0.330	U	0.330
4-Nitroaniline	0.825	U	0.825
4,6-Dinitro-2-methylphenol	0.825	U	0.825
N-Nitrosodiphenylamine (1)	0.330	U	0.330
4-Bromophenyl-phenylether	0.330	U	0.330
Hexachlorobenzene	0.330	U	0.330
Pentachlorophenol	0.825	U	0.825
Phenanthrene	0.330	U	0.330
Anthracene	0.330	U	0.330
Di-n-butylphthalate	0.330	U	0.330
Fluoranthene	0.330	U	0.330
Pyrene	0.330	U	0.330
Butylbenzylphthalate	0.330	U	0.330
3,3'-Dichlorobenzidine	0.330	U	0.330
Benzo(a)anthracene	0.330	U	0.330
Chrysene	0.330	U	0.330
bis(2-Ethylhexyl)phthalate	0.330	U	0.330
Di-n-octylphthalate	0.330	U	0.330
Benzo(b)fluoranthene	0.330	U	0.330
Benzo(k)fluoranthene	0.330	U	0.330
Benzo(a)pyrene	0.330	U	0.330
Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Dibenzo(a,h)anthracene	0.330	U	0.330
Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-245  
409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1001  
SAMPLE DATE: 10/19/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	66	23 - 120
2-Fluorobiphenyl	64	30 - 115
Terphenyl-D14	70	18 - 137
Phenol-D5	54	24 - 113
2-Fluorophenol	56	25 - 121
2,4,6-Tribromophenol	76	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1001**  
 SAMPLE DATE: **10/19/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **109.890**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.9		0.88	7060	11/08/93
Aluminum	13000		22	6010	11/09/93
Barium	59	N	22	6010	11/09/93
Beryllium	0.55	U	0.55	6010	11/09/93
Cadmium	0.55	U	0.55	6010	11/09/93
Chromium	24	*	1.1	6010	11/09/93
Copper	7.3	*	2.7	6010	11/09/93
Iron	13000	*	11	6010	11/09/93
Nickel	15	*	4.4	6010	11/09/93
Lead	5.1	N	0.26	7421	11/09/93
Mercury	0.021	U	0.021	7471	11/06/93
Silver	1.1	U	1.1	6010	11/09/93
Zinc	22		2.2	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-245

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SAMPLE ID: A1002  
SAMPLE DATE: 10/19/93 15:15:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u> <u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1002  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	17	B	10	1,1,2-Trichloroethane	5	U	5
Acetone	21	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
-Dichloroethane	5	U	5	Bromoform	5	U	5
ans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	5.4	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	0.8	J	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	107	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	102	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245

TEST NAME: AEM HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1002  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/05/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting				Reporting		
			Result	Qual	Limit		Result	Qual	Limit
Phenol			0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether			0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol			0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene			0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol			0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene			0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol			0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether			0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol			0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine			0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane			0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene			0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone			0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol			0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol			0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid			0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane			0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol			0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene			0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene			0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline			0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene			0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol			0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene			0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene			0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol			0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol			0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene			0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline			0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate			0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene			0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
						Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-245  
409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1002  
SAMPLE DATE: 10/19/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	57	23 - 120
2-Fluorobiphenyl	63	30 - 115
Terphenyl-D14	66	18 - 137
Phenol-D5	53	24 - 113
2-Fluorophenol	51	25 - 121
2,4,6-Tribromophenol	62	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1002  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 100.000  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.1	U	1.1	7060	11/08/93
Aluminum	12000		20	6010	11/09/93
Barium	160	N	20	6010	11/09/93
Beryllium	0.50	U	0.50	6010	11/09/93
Cadmium	0.50	U	0.50	6010	11/09/93
Chromium	25	*	1.0	6010	11/09/93
Copper	7.7	*	2.5	6010	11/09/93
Iron	13000	*	10	6010	11/09/93
Nickel	19	*	4.0	6010	11/09/93
Lead	4.9	N	0.32	7421	11/09/93
Mercury	0.026	U	0.026	7471	11/06/93
Silver	1.0	U	1.0	6010	11/09/93
Zinc	21		2.0	6010	11/09/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-245

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SAMPLE ID: A1003  
SAMPLE DATE: 10/19/93 15:45:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10 MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1003  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	9.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.4	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.3	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	100	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1003  
 SAMPLE DATE: 10/19/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/04/93  
 DILUTION FACTOR: 0.033

	UNITS:	MG/KG	Reporting			Reporting	
			Result	Qual Limit		Result	Qual Limit
Phenol		0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether		0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol		0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene		0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol		0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene		0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol		0.330	U	0.330	Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether		0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol		0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine		0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane		0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene		0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone		0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol		0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol		0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid		0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane		0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol		0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene		0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene		0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline		0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene		0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol		0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene		0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene		0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol		0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol		0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene		0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline		0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate		0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene		0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
					Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-245

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1003  
SAMPLE DATE: 10/19/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	69	23 - 120
2-Fluorobiphenyl	76	30 - 115
Terphenyl-D14	87	18 - 137
Phenol-D5	62	24 - 113
2-Fluorophenol	74	25 - 121
2,4,6-Tribromophenol	74	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1003**  
 SAMPLE DATE: **10/19/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **89.2857**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.0		0.95	7060	11/08/93
Aluminum	3000		18	6010	11/09/93
Barium	900	N	18	6010	11/09/93
Beryllium	0.45	U	0.45	6010	11/09/93
Cadmium	0.54		0.45	6010	11/09/93
Chromium	8.1	*	0.89	6010	11/09/93
Copper	2.3	*	2.2	6010	11/09/93
Iron	6500	*	8.9	6010	11/09/93
Nickel	6.6	*	3.6	6010	11/09/93
Lead	2.7	N	0.29	7421	11/09/93
Mercury	0.023	U	0.023	7471	11/06/93
Silver	0.89	U	0.89	6010	11/09/93
Zinc	7.7		1.8	6010	11/09/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-10-245  
409832-003-01

SAMPLE ID: LAB BLANK  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/02/93	EPA7196

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/02/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	4.5	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	3.7	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	101	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 10/28/93  
 ANALYSIS DATE: 11/01/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.14	J	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-245

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
SAMPLE DATE: not spec  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	82	23 - 120
2-Fluorobiphenyl	83	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	68	24 - 113
2-Fluorophenol	67	25 - 121
2,4,6-Tribromophenol	77	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/04/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-10-245  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **LAB BLANK**  
 SAMPLE DATE: **not spec**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **1.00000**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/08/93
Aluminum	0.20	U	0.20	6010	11/09/93
Barium	0.20	U	0.20	6010	11/09/93
Beryllium	0.0050	U	0.0050	6010	11/09/93
Cadmium	0.0050	U	0.0050	6010	11/09/93
Chromium	0.011		0.010	6010	11/09/93
Copper	0.025	U	0.025	6010	11/09/93
Iron	0.10	U	0.10	6010	11/09/93
Nickel	0.040	U	0.040	6010	11/09/93
Lead	0.0030	U	0.0030	7421	11/09/93
Mercury	0.00020	U	0.00020	7471	11/06/93
Silver	0.010	U	0.010	6010	11/09/93
Zinc	0.020	U	0.020	6010	11/09/93

**Data qualifier key:**  
 E - estimated value  
 M - duplicate injection precision not met  
 N - spike recovery not within control limits  
 S - determined by MSA  
 W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance  
 \* - duplicate analysis outside control limits  
 + - Correlation coefficient for the MSA <0.995  
 B - < CRDL but >= IDL  
 U - none detected  
 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Chromium concentration in prep blank for ICPEs analysis at 11 ppb, slightly above the PQL of 10 ppb.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-245

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Referenced notes for this work order:

B310245

Batch matrix spike duplicate and % RPD for matrix spikes outside control limits due to matrix interference on barium analysis by ICPES. LCS / LCSD results and method Quality Control were acceptable. All solid samples included with batch.

Batch duplicate analysis outside control limits due to matrix interference on chromium, copper, iron and nickel analysis by ICPES. LCS / LCSD results and method Quality Control were acceptable. All solid samples included with batch.

Prep blank for ICPES analysis contained chromium at 11 ppb, 1 ppb above the PQL. All solid samples included in batch.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-10-245

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME Hazardous Substance Vols.

TEST CODE 8240TK

Hazardous Substance List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME ABN HSL GC/MS Extractables

TEST CODE 8270TK

Hazardous Substance List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME Arsenic - Graphite Furnace

TEST CODE AS\_GF

Arsenic Graphite Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME Chromium VI

TEST CODE CR\_VI

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

TEST NAME Mercury

TEST CODE HG\_AA

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Company: IT CORPORATION  
Date: 12/04/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
409832-003-01 (512) 892-6684  
Work Order: B3-10-245

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TEST NAME Mercury

TEST CODE HG\_AA

Method 245.5-"Technical Additions to Methods for  
Chemical Analysis of Water and Wastes,"  
EPA-600/4-82-055, December 1982.

TEST NAME Metals

TEST CODE ICPTK2

Method not available.

TEST NAME Lead - Graphite Furnace

TEST CODE PB\_GF

Lead  
Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical  
Analysis of Water and Wastes," EPA-600/4-82-055,  
December 1982.

TEST NAME GFAA Digestion - Soil

TEST CODE Z3050F

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
Graphite Furnace/Flame AA analysis.

TEST NAME ICPEs Digestion - Soil

TEST CODE Z3050P

Soil Digestion

Method 3050, SW-846, Test Methods for Evaluating Solid  
Wastes, Third Edition. Acid digestion technique for  
ICPEs analysis. Equivalent to Method 3050A, SW-846  
Update I, July 1992.



INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD \* Reference Document No. 514039 Page 1 of 2

Project Name/No. 1 THRS 409837230/Samples Shipment Date 7 10-19-93 Bill to: 5 409837.03.01

Sample Team Members 2 AG/WR Lab Destination 8 ITAS-Austin

Profile Center No. 3 35272 Lab Contact 9 Karren Deane

Project Manager 4 Timmy Taylor Project Contact/Phone 12 405-736-2260 - Dan McGee Report to: 10 Timmy Taylor

Purchase Order No. 6 --- Carrier/Waybill No. 13 Fedex 8460755446 ITAS-Austin

Required Report Date 11 15 Days

**ONE CONTAINER PER LINE**

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-19 servative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1001	Soil	10-19-93	125ml	→	COOL	827D, 6000	Good 1°C RxC 10.20.93	HERE ONLY
A1002	Soil	10-19-93	125ml	→	---	827D, 6000	---	HERE ONLY
A1003	Soil	10-19-93	125ml	→	---	827D, 6000	---	HERE ONLY
A1003	Soil	10-19-93	500ml	→	---	827D, 6000	---	HERE ONLY

Special Instructions: 23

Possible Hazard Identification: 24

Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Turnaround Time Required: 26

Normal  Rush

QC Level: 27

Project Specific (specify):

1. Relinquished by 28 [Signature] Date: 10-19-93 Time: 1900

2. Relinquished by [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Relinquished by [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: 29

Sample Disposal: 25

Return to Client  Disposal by Lab  Archive \_\_\_\_\_ (mos.)

\*See back of form for special instructions. Yellow: Field copy

White: To accompany samples

Auxiliary Data Summary

12/03/93

Work order : B310245

Sample ID : A1001

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
O1B						
	Arsenic	B310245-04B	11043050F1	11/04/93	11/08/93	87.7
	Chromium VI	B310245-04B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310245-04B	1106HGAA1	11/06/93	11/06/93	106
	Lead	B310245-04B	11043050F1	11/04/93	11/09/93	87.7

Auxiliary Data Summary

12/03/93

Work order : B310245

Sample ID : A1002

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B310245-04B	11043050F1	11/04/93	11/08/93	105
	Chromium VI	B310245-04B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310245-04B	1106HGAA1	11/06/93	11/06/93	130
	Lead	B304245-04B	11043050F1	11/04/93	11/09/93	105

Auxiliary Data Summary

12/03/93

Work order : B310245

Sample ID : A1003

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B	Arsenic	B310245-04B	11043050F1	11/04/93	11/08/93	95.2
	Chromium VI	B310245-04B	1102CR_VI1	11/02/93	11/02/93	10.0
	Mercury	B310245-04B	1106HGAA1	11/06/93	11/06/93	116
	Lead	B310245-04B	11043050F1	11/04/93	11/09/93	95.2

Auxiliary Data Summary

12/03/93

Work order : B310245

Sample ID : LAB BLANK

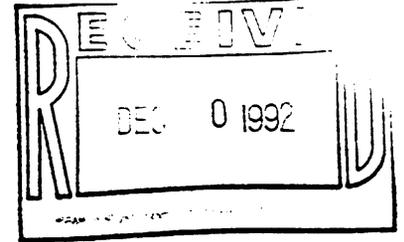
FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B	Arsenic	B310245-04B	11043050F1	11/04/93	11/08/93	1.0
	Chromium VI	B310245-04B	1102CR_VI1	11/02/93	11/02/93	1.0
	Mercury	B310245-04B	1106HGAA1	11/06/93	11/06/93	1.0
	Lead	B310245-04B	11043050F1	11/04/93	11/09/93	1.0





INTERNATIONAL  
TECHNOLOGY  
CORPORATION

# ANALYTICAL SERVICES



Routed to KH, CF, TL  
12/10/93

## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/10/93

Work Order: B3-11-066

This is the Certificate of Analysis for the following samples:

Client Work ID: D.O.5001  
Date Received: 11/04/93  
Number of Samples: 12  
Sample Type: SOIL/WATER

409832-003-01

### I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1517	B3-11-066-01
A1518	B3-11-066-02
A1519	B3-11-066-03
A1520	B3-11-066-04
A1521	B3-11-066-05
A1522	B3-11-066-06
A1522-MS	B3-11-066-07
A1522-MSD	B3-11-066-08
LAB BLANK #1	B3-11-066-09
LAB BLANK #2	B3-11-066-10
A1518 MS	B3-11-066-11
A1518 MSD	B3-11-066-12

Reviewed and Approved:

  
\_\_\_\_\_  
Jon Bartell  
Laboratory Director

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories  
American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

---

## II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

## III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1517  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	93	88 - 110
BROMOFLUOROBENZENE	96	86 - 115
1,2-DICHLOROETHANE-D4	103	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

---

SAMPLE ID: A1518  
SAMPLE DATE: 11/03/93 09:35:00  
SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010 mg/L	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1518  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.9	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	94	88 - 110
BROMOFLUOROBENZENE	103	86 - 115
1,2-DICHLOROETHANE-D4	100	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1518  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 1.0

UNITS:	UG/L	Reporting			Reporting		
		Result	Qual	Limit	Result	Qual	Limit
Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
1,4-Dichlorobenzene	1.7	JB	10	4-Nitrophenol	25	U	25
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10
2-Methylphenol	10	U	10	Diethylphthalate	10	U	10
(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
methylphenol	10	U	10	Fluorene	10	U	10
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
Benzoic Acid	10	U	10	Phenanthrene	10	U	10
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
Naphthalene	10	U	10	Pyrene	10	U	10
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	5.4	JB	10
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
				Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1518  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: WATER

Surrogates	% Recovery	Limits
Nitrobenzene-D5	36	35 - 114
2-Fluorobiphenyl	48	43 - 116
Terphenyl-D14	87	33 - 141
Phenol-D5	42	10 - 94
2-Fluorophenol	48	21 - 100
2,4,6-Tribromophenol	65	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1518**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **WATER**  
 DILUTION FACTOR (6010): **1.0**  
 UNITS: **MG/L**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	12/08/93
Barium	0.20	U	0.20	6010	12/08/93
Beryllium	0.0050	U	0.0050	6010	12/08/93
Cadmium	0.0050	U	0.0050	6010	12/08/93
Chromium	0.010	U	0.010	6010	12/08/93
Copper	0.025	U	0.025	6010	12/08/93
Iron	0.10	U	0.10	6010	12/08/93
Nickel	0.040	U	0.040	6010	12/08/93
Lead	0.0030	U	0.0030	7421	11/11/93
Mercury	0.00020	U	0.00020	7471	11/16/93
Silver	0.010	U	0.010	6010	12/08/93
Zinc	0.020	U	0.020	6010	12/08/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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SAMPLE ID: A1519  
SAMPLE DATE: 11/03/93 08:50:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1519  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	5.6	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	7.5	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	7.8		5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.5	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	96	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1519  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.059	J 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.085	J	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1519  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	83	23 - 120
2-Fluorobiphenyl	94	30 - 115
Terphenyl-D14	84	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	56	25 - 121
2,4,6-Tribromophenol	96	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1519  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 112.359  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	1.1	UN	1.1	7060	11/17/93
Aluminum	13000	*N	22	6010	11/18/93
Barium	160	N	22	6010	11/18/93
Beryllium	0.97		0.56	6010	11/18/93
Cadmium	0.67		0.56	6010	11/18/93
Chromium	12	*	1.1	6010	11/18/93
Copper	9.0	*	2.8	6010	11/18/93
Iron	8500	*N	11	6010	11/18/93
Nickel	8.2		4.5	6010	11/18/93
Lead	5.5	N	0.34	7421	11/17/93
Mercury	0.031		0.025	7471	11/17/93
Silver	1.1	U	1.1	6010	11/18/93
Zinc	21	*	2.2	6010	11/18/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01      Work Order: B3-11-066

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SAMPLE ID: A1520  
SAMPLE DATE: 11/03/93 08:55:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.49U	0.49	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1520  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	5.8	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	2.5	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	2.4	J	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.5	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	99	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066

409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1520**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**

UNITS:	MG/KG	Reporting			MG/KG	Reporting	
		Result	Qual Limit			Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
4-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.054	J	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1520**  
SAMPLE DATE: **11/03/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	81	18 - 137
Phenol-D5	63	24 - 113
2-Fluorophenol	50	25 - 121
2,4,6-Tribromophenol	89	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1520  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 93.4579  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	12	UN	3.9	7060	11/17/93
Aluminum	8900	*N	19	6010	11/18/93
Barium	1200	N	19	6010	11/18/93
Beryllium	1.6		0.47	6010	11/18/93
Cadmium	1.1		0.47	6010	11/18/93
Chromium	14	*	0.93	6010	11/18/93
Copper	9.4	*	2.3	6010	11/18/93
Iron	19000	* N	9.3	6010	11/18/93
Nickel	25		3.7	6010	11/18/93
Lead	33	N	2.8	7421	11/17/93
Mercury	0.031		0.025	7471	11/17/93
Silver	0.93		0.93	6010	11/18/93
Zinc	17	*	1.9	6010	11/18/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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SAMPLE ID: A1521  
SAMPLE DATE: 11/03/93 09:00:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.51U	0.51 MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1521  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	3.4	J	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	5.5	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.4	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
trans-1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
cis-1,2-Dichloroethane	5.7		5	2-Hexanone	50	U	50
Chloroform	5	U	5	4-Methyl-2-pentanone	50	U	50
1,2-Dichloroethane	5	U	5	Tetrachloroethene	9.0		5
2-Butanone	4.4	JB	100	1,1,2,2-Tetrachloroethane	5	U	5
1,1,1-Trichloroethane	5	U	5	Toluene	5	U	5
Carbon tetrachloride	5	U	5	Chlorobenzene	5	U	5
Vinyl acetate	10	U	10	Ethylbenzene	5	U	5
Dichlorobromomethane	5	U	5	Styrene	5	U	5
				Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	105	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	102	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: AEW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1521  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
1-(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1521  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	80	23 - 120
2-Fluorobiphenyl	91	30 - 115
Terphenyl-D14	85	18 - 137
Phenol-D5	65	24 - 113
2-Fluorophenol	54	25 - 121
2,4,6-Tribromophenol	93	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1521  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 98.0392  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	0.86	7060	11/17/93
Aluminum	9700	*N	20	6010	11/18/93
Barium	1900	N	20	6010	11/18/93
Beryllium	1.8		0.49	6010	11/18/93
Cadmium	0.95		0.49	6010	11/18/93
Chromium	18	*	0.98	6010	11/18/93
Copper	13	*	2.5	6010	11/18/93
Iron	23000	*N	9.8	6010	11/18/93
Nickel	19		3.9	6010	11/18/93
Lead	6.7	N	0.29	7421	11/17/93
Mercury	0.027	U	0.027	7471	11/17/93
Silver	1.0		0.98	6010	11/18/93
Zinc	25	*	2.0	6010	11/18/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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SAMPLE ID: A1522  
SAMPLE DATE: 11/03/93 09:03:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.50U	0.50	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1522  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	14		5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	9.4	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	16	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	7.4		5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	1.7	J	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5.8		5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	6.6		5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	6.0	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	2.8	J	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-11-066

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1522**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/15/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **MG/KG**

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
1-Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1522  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	80	18 - 137
Phenol-D5	62	24 - 113
2-Fluorophenol	52	25 - 121
2,4,6-Tribromophenol	80	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: A1522  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 91.7431  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.2	N	0.89	7060	11/17/93
Aluminum	12000	*N	18	6010	11/18/93
Barium	750	N	18	6010	11/18/93
Beryllium	0.90		0.46	6010	11/18/93
Cadmium	0.46	U	0.46	6010	11/18/93
Chromium	16	*	0.92	6010	11/18/93
Copper	7.9	*	2.3	6010	11/18/93
Iron	13000	*N	9.2	6010	11/18/93
Nickel	12		3.7	6010	11/18/93
Lead	9.7	N	1.1	7421	11/17/93
Mercury	0.029	U	0.029	7471	11/17/93
Silver	0.92	U	0.92	6010	11/18/93
Zinc	20	*	1.8	6010	11/18/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Referenced notes for these results:

Duplicate analysis outside control limits due to matrix interference on aluminum, chromium, copper, iron and zinc analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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SAMPLE ID: A1522-MS  
SAMPLE DATE: 11/03/93 09:03:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		113	% REC	11/17/93	EPA7196

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1522-MS  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	129	Trichloroethene	95
		Benzene	114
		Toluene	108
		Chlorobenzene	107

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	108	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPAS270**

SAMPLE ID: **A1522-MS**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **% REC**

	Result		Result
Phenol	69	Acenaphthene	121
2-Chlorophenol	86	4-Nitrophenol	89
1,4-Dichlorobenzene	73	2,4-Dinitrotoluene	91
N-Nitroso-di-n-propylamine	96	Pentachlorophenol	86
1,2,4-Trichlorobenzene	88	Pyrene	98
4-Chloro-3-methylphenol	85		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	88	30 - 115
Terphenyl-D14	85	18 - 137
Phenol-D5	66	24 - 113
2-Fluorophenol	58	25 - 121
2,4,6-Tribromophenol	93	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1522-MS**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **113.636**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	0	7060	11/17/93
Aluminum	312	6010	11/18/93
Barium	0	6010	11/18/93
Beryllium	88	6010	11/18/93
Cadmium	85	6010	11/18/93
Chromium	85	6010	11/18/93
Copper	88	6010	11/18/93
Iron	0	6010	11/18/93
Nickel	83	6010	11/18/93
Lead	0	7421	11/17/93
Mercury	111	7471	11/17/93
Silver	86	6010	11/18/93
Zinc	81	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs.  
 % RPD for matrix spikes also outside control limits due to matrix interference on barium and iron analysis by ICPEs.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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SAMPLE ID: A1522-MSD  
SAMPLE DATE: 11/03/93 09:03:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		115	% REC	11/17/93	EPA7196

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1522-MSD  
SAMPLE DATE: 11/03/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	120	Trichloroethene	86
		Benzene	105
		Toluene	105
		Chlorobenzene	103

Surrogates	% Recovery	Limits
TOLUENE-D8	99	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1522-MSD  
 SAMPLE DATE: 11/03/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033  
 UNITS: % REC

	Result		Result
Phenol	72	Acenaphthene	125
2-Chlorophenol	86	4-Nitrophenol	82
1,4-Dichlorobenzene	76	2,4-Dinitrotoluene	90
N-Nitroso-di-n-propylamine	96	Pentachlorophenol	85
1,2,4-Trichlorobenzene	91	Pyrene	102
4-Chloro-3-methylphenol	89		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	85	23 - 120
2-Fluorobiphenyl	95	30 - 115
Terphenyl-D14	89	18 - 137
Phenol-D5	68	24 - 113
2-Fluorophenol	60	25 - 121
2,4,6-Tribromophenol	93	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1522-MSD**  
 SAMPLE DATE: **11/03/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **100.000**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	1.1	7060	11/17/93
Aluminum	341	6010	11/18/93
Barium	42	6010	11/18/93
Beryllium	89	6010	11/18/93
Cadmium	87	6010	11/18/93
Chromium	85	6010	11/18/93
Copper	89	6010	11/18/93
Iron	0	6010	11/18/93
Nickel	82	6010	11/18/93
Lead	0	7421	11/17/93
Mercury	112	7471	11/17/93
Silver	87	6010	11/18/93
Zinc	82	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs.  
 % RPD for matrix spikes also outside control limits due to matrix interference on barium and iron analysis by ICPEs.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

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409832-003-01 Work Order: B3-11-066

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SAMPLE ID: LAB BLANK #1  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.8	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.7	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.5	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK #1  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Reporting			Reporting		
	Result	Qual	Limit	Result	Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
4-methylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-11-066  
409832-003-01

TEST NAME: ABW HSL GC/MS Extractables  
METHOD REFERENCE: EP8270

SAMPLE ID: LAB BLANK #1  
SAMPLE DATE: not spec  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	51	23 - 120
2-Fluorobiphenyl	69	30 - 115
Terphenyl-D14	78	18 - 137
Phenol-D5	51	24 - 113
2-Fluorophenol	41	25 - 121
2,4,6-Tribromophenol	69	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **LAB BLANK #1**  
 SAMPLE DATE: **not spec**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **1.0**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/17/93
Aluminum	0.23		0.20	6010	11/18/93
Barium	0.20	U	0.20	6010	11/18/93
Beryllium	0.0050	U	0.0050	6010	11/18/93
Cadmium	0.0050	U	0.0050	6010	11/18/93
Chromium	0.010	U	0.010	6010	11/18/93
Copper	0.025	U	0.025	6010	11/18/93
Iron	0.10	U	0.10	6010	11/18/93
Nickel	0.040	U	0.040	6010	11/18/93
Lead	0.0030	U	0.0030	7421	11/17/93
Mercury	0.00020		0.00020	7471	11/17/93
Silver	0.010	U	0.010	6010	11/18/93
Zinc	0.020	U	0.020	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
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Work Order: B3-11-066

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SAMPLE ID: LAB BLANK #2  
SAMPLE DATE:  
SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010 MG/L	11/04/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: E3-11-066

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK #2  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	96	88 - 110
BROMOFLUOROBENZENE	107	86 - 115
1,2-DICHLOROETHANE-D4	100	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EP8270**

SAMPLE ID: **LAB BLANK #2**  
 SAMPLE DATE: **not spec**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **1.0**

	UNITS: UG/L			Reporting			Reporting		
	Result	Qual	Limit	Result	Qual	Limit	Result	Qual	Limit
Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10		
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25		
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10		
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25		
1,4-Dichlorobenzene	1.4	J	10	4-Nitrophenol	25	U	25		
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10		
1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10		
2-Methylphenol	10	U	10	Diethylphthalate	10	U	10		
bis(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10		
2-Methylphenol	10	U	10	Fluorene	10	U	10		
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10		
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25		
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10		
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10		
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10		
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25		
Benzoic Acid	10	U	10	Phenanthrene	10	U	10		
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10		
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10		
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10		
Naphthalene	10	U	10	Pyrene	10	U	10		
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10		
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10		
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10		
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10		
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	2.7	J	10		
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10		
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10		
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10		
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10		
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10		
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10		
				Benzo(g,h,i)perylene	10	U	10		

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK #2**  
SAMPLE DATE: **not spec**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	44	35 - 114
2-Fluorobiphenyl	58	43 - 116
Terphenyl-D14	84	33 - 141
Phenol-D5	45	10 - 94
2-Fluorophenol	29	21 - 100
2,4,6-Tribromophenol	64	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-066  
 409832-003-01

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK #2  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: WATER  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/L

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/12/93
Aluminum	0.20	U	0.20	6010	12/08/93
Barium	0.20	U	0.20	6010	12/08/93
Beryllium	0.0050	U	0.0050	6010	12/08/93
Cadmium	0.0050	U	0.0050	6010	12/08/93
Chromium	0.010	U	0.010	6010	12/08/93
Copper	0.025	U	0.025	6010	12/08/93
Iron	0.10	U	0.10	6010	12/08/93
Nickel	0.040	U	0.040	6010	12/08/93
Lead	0.0030	U	0.0030	7421	11/11/93
Mercury	0.00020	U	0.00020	7471	11/16/93
Silver	0.010	U	0.010	6010	12/08/93
Zinc	0.020	U	0.020	6010	12/08/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1518 MS  
SAMPLE DATE:  
SAMPLE MATRIX: WATER  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: UG/KG

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
1,1-Dichloroethene	119	5	Trichloroethene	105	5
			Benzene	109	5
			Toluene	100	5
			Chlorobenzene	102	5

Surrogates	% Recovery	Limits
TOLUENE-D8	95	88 - 110
BROMOFLUOROBENZENE	105	86 - 115
1,2-DICHLOROETHANE-D4	101	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1518 MSD  
SAMPLE DATE:  
SAMPLE MATRIX: WATER  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: REC

	Reporting			Reporting	
	Result	Qual Limit		Result	Qual Limit
1,1-Dichloroethene	117	5	Trichloroethene	107	5
			Benzene	109	5
			Toluene	102	5
			Chlorobenzene	104	5

Surrogates	% Recovery	Limits
TOLUENE-D8	95	88 - 110
BROMOFLUOROBENZENE	105	86 - 115
1,2-DICHLOROETHANE-D4	100	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Page: 49 of 52

Company: IT CORPORATION

Date: 12/10/93

Client Work ID: D.O.5001

IT ANALYTICAL SERVICES

AUSTIN, TX

(512) 892-6684

409832-003-01

Work Order: B3-11-066

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Referenced notes for this work order:

B311066

Prep blank for ICPES analysis had aluminum concentration greater than the PQL (230 ppb). This concentration was less than 5% of all batched soil samples' concentration.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME Hazardous Substance Vols.

TEST CODE 8240TK

Hazardous Substance List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME ABN HSL GC/MS Extractables

TEST CODE 8270TK

Hazardous Substance List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME Arsenic - Graphite Furnace

TEST CODE AS\_GF

Arsenic Graphite Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME Chromium VI

TEST CODE CR\_VI

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

TEST NAME Mercury

TEST CODE HG\_AA

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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TEST NAME **Mercury**

TEST CODE **HG\_AA**

Method 245.5-"Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME **Metals**

TEST CODE **ICPTK2**

Method not available.

TEST NAME **Lead - Graphite Furnace**

TEST CODE **PB\_GF**

Lead

Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME **ICPES Digestion - Water**

TEST CODE **Z3005**

Water Digestion

Method 3005A, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Digestion procedure for the preparation of surface and ground water samples for analysis by flame atomic absorption spectroscopy and inductively coupled plasma spectroscopy. The procedure determines total recoverable or dissolved metals.

TEST NAME **GFAA Digestion - Water**

TEST CODE **Z3020**

Water Digestion

Method 3020, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace.

TEST NAME **GFAA Digestion - Soil**

TEST CODE **Z3050F**

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-066

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TEST NAME **GFAA Digestion - Soil** TEST CODE **Z3050F**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace/Flame AA analysis.

TEST NAME **ICPES Digestion - Soil** TEST CODE **Z3050P**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for ICPES analysis. Equivalent to Method 3050A, SW-846 Update I, July 1992.



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

**ANALYSIS REFERENCE DOCUMENT  
CHAIN OF CUSTODY RECORD\***

Reference Document No. 416583  
Page 1 of 2

White: To accompany samples

Yellow: Field copy

\*See back of form for special instructions

Project Name/No. 1 TAFB 5001/409832.03 Samples Shipment Date 7 11-3-93 Bill to: 5 409832.03  
 Sample Team Members 2 L. Rodriguez/A. Wilson Lab Destination 8 ITAS-AUSTIN D.O. 5001  
 Profit Center No. 3 3527 Lab Contact 9 Karen Deane  
 Project Manager 4 Jimmy Taylor (405) 736-2260 Report to: 10 Tim Jenkins  
 Purchase Order No. 6 409832.003 Carrier/Waybill No. 13 FedEx 846075516 IT-Austin  
 Required Report Date 11 NoRMA

**ONE CONTAINER PER LINE**

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-serve	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1517	Trip Blank	10/21/93	100ml	100ml	HCL	VDA 8240	Good (see 8/21/93)	B3244/100A KPC
A1518	Equipment Rinse	11/3/93	40ml	40ml	HCL	VDA 8240	See	B3244/100A
A1518	EAP Rinse	11/3/93	1L	1L	ICE	SUCC 8270		
A1518	EAP Rinse	11/3/93	0.5L	0.5L	HADA	Metals (60/7000)		
A1518	EAP Rinse	11/3/93	0.05L	0.05L	ICE	Hex Chrome		
A1519	Soil Sample	11/3/93	125ml	125ml	ICE	VDA 8240		
A1519	Soil Sample	11/3/93	500ml	500ml	ICE	Metals (60/7000) SUCC 8270		
A1520	Soil Sample	11/3/93	125ml	125ml	ICE	VDA 8240		

Special Instructions: 23

Possible Hazard Identification: 24

Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Turnaround Time Required: 26

Normal  Rush

QC Level: 27

I:  II:  III:

Project Specific (specify):

1. Relinquished by *Luis Rodriguez* Date: 11-3-93 Time: 1621  
 (Signature/Affiliation)  
 2. Relinquished by \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 (Signature/Affiliation)  
 3. Relinquished by \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 (Signature/Affiliation)  
 Comments: 29

Sample Disposal: 25

Return to Client  Disposal by Lab  Archive

(mos.)

1. Received by *Luis Rodriguez* Date: 11-9-93  
 (Signature/Affiliation) Time: 0857

2. Received by \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_

3. Received by \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature/Affiliation) Time: \_\_\_\_\_



Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1518

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02C	- -					
	Arsenic	B311066-10B	111030201	11/10/93	11/12/93	1.0
	Mercury	B311066-10B	1116HGAA2	11/16/93	11/16/93	1.0
	Lead	B311066-10B	111030201	11/10/93	11/11/93	1.0
02D	Chromium VI	B311066-10B	1104CR_VI2	11/04/93	11/04/93	1.0

Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1519

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B						
	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	114
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	49.5
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	120
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	114

Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1520

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B						
	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	385
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	49.0
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	118
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	962

Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1521

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B	- -					
	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	86.2
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	50.5
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	127
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	86.2

## Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1522

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
06B						
	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	89.3
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	50.0
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	137
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	357

## Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1522-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07B						
	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	93.4
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	50.0
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	109
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	93.4

Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : A1522-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	110
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	50.5
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	106
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	110

Auxiliary Data Summary

12/09/93

Work order : B311066

Sample ID : LAB BLANK #1

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
09B	Arsenic	B311066-09B	11153050F2	11/15/93	11/17/93	1.0
	Chromium VI	B311066-09B	1117CR_VI1	11/17/93	11/17/93	1.0
	Mercury	B311066-09B	1117HGAA4	11/17/93	11/17/93	1.0
	Lead	B311066-09B	11153050F2	11/15/93	11/17/93	1.0

Auxiliary Data Summary

12/09/93

Work order : B311066

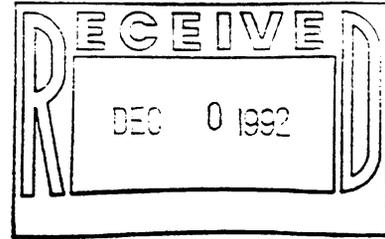
Sample ID : LAB BLANK #2

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B						
	Arsenic	B311066-09B	111030201	11/10/93	11/12/93	1.0
	Chromium VI	B311066-10B	1104CR_VI1	11/04/93	11/04/93	1.0
	Mercury	B311066-09B	1116HGAA2	11/16/93	11/16/93	1.0
	Lead	B311066-09B	111030201	11/10/93	11/11/93	1.0

TPJ



# ANALYTICAL SERVICES



Control to KH, CF, TL  
12/10/93

## CERTIFICATE OF ANALYSIS

IT CORPORATION  
1250 CAPITAL OF TX HWY  
BLDG. 3, SUITE 200  
AUSTIN, TX 78746-6443  
TIM JENNINGS

Date: 12/10/93

Work Order: B3-11-077

This is the Certificate of Analysis for the following samples:

Client Work ID: D.O.5001	409832-003-01
Date Received: 11/05/93	
Number of Samples: 9	
Sample Type: SOIL	

### I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
A1524	B3-11-077-01
A1524-MS	B3-11-077-02
A1524-MSD	B3-11-077-03
A1525	B3-11-077-04
A1526	B3-11-077-05
2-68A14.5	B3-11-077-06
A1523	B3-11-077-07
LAB BLANK	B3-11-077-08
LAB BLANK	B3-11-077-09

Reviewed and Approved:

  
 \_\_\_\_\_  
 Jon Bartell  
 Laboratory Director

American Council of Independent Laboratories  
 International Association of Environmental Testing Laboratories  
 American Association for Laboratory Accreditation

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

---

II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

SAMPLE ID: A1524  
SAMPLE DATE: 11/04/93 13:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.099U	0.099	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-11-077  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1524  
 SAMPLE DATE: 11/04/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	5.1	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	9.2	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	4.1	JB	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	95	74 - 121
1,2-DICHLOROETHANE-D4	103	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1524**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**

	UNITS: <b>MG/KG</b>	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
Methylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.067	J 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1524**  
SAMPLE DATE: **11/04/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	77	23 - 120
2-Fluorobiphenyl	85	30 - 115
Terphenyl-D14	76	18 - 137
Phenol-D5	61	24 - 113
2-Fluorophenol	52	25 - 121
2,4,6-Tribromophenol	84	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1524**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **95.2380**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	3.4	N	0.96	7060	11/19/93
Aluminum	7300	*N	19	6010	11/18/93
Barium	260	*N	19	6010	11/18/93
Beryllium	0.90		0.48	6010	11/18/93
Cadmium	0.48	U	0.48	6010	11/18/93
Chromium	8.6	*	0.95	6010	11/18/93
Copper	5.8		2.4	6010	11/18/93
Iron	7900	*N	9.5	6010	11/18/93
Nickel	12	*	3.8	6010	11/18/93
Lead	7.9	N	0.58	7421	11/19/93
Mercury	0.022	U	0.022	7471	11/19/93
Silver	0.95	U	0.95	6010	11/18/93
Zinc	12		1.9	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Duplicate analysis outside control limits due to matrix interference on aluminum, barium, chromium, iron and nickel analysis by ICPES. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

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SAMPLE ID: A1524-MS  
SAMPLE DATE: 11/04/93 13:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		101	% REC	11/17/93	EPA7196

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1524-MS  
SAMPLE DATE: 11/04/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	121	Trichloroethene	91
		Benzene	110
		Toluene	111
		Chlorobenzene	112

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	94	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1524-MS**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**  
 UNITS: **% REC**

	Result		Result
Phenol	68	Acenaphthene	119
2-Chlorophenol	82	4-Nitrophenol	80
1,4-Dichlorobenzene	71	2,4-Dinitrotoluene	89
N-Nitroso-di-n-propylamine	92	Pentachlorophenol	81
1,2,4-Trichlorobenzene	89	Pyrene	95
4-Chloro-3-methylphenol	82		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	76	23 - 120
2-Fluorobiphenyl	87	30 - 115
Terphenyl-D14	78	18 - 137
Phenol-D5	63	24 - 113
2-Fluorophenol	57	25 - 121
2,4,6-Tribromophenol	83	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1524-MS**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **109.890**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	127	7060	11/19/93
Aluminum	1400	6010	11/18/93
Barium	760	6010	11/18/93
Beryllium	89	6010	11/18/93
Cadmium	88	6010	11/18/93
Chromium	97	6010	11/18/93
Copper	92	6010	11/18/93
Iron	716	6010	11/18/93
Nickel	91	6010	11/18/93
Lead	240	7421	11/19/93
Mercury	114	7471	11/19/93
Silver	87	6010	11/18/93
Zinc	95	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

% RPD for matrix spikes also outside control limits due to matrix interference on barium analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
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409832-003-01 Work Order: B3-11-077

---

SAMPLE ID: A1524-MSD  
SAMPLE DATE: 11/04/93 13:05:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		108	% REC	11/17/93	EPA7196

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1524-MSD  
SAMPLE DATE: 11/04/93  
SAMPLE MATRIX: SOIL  
ANALYSIS DATE: 11/12/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	127	Trichloroethene	87
		Benzene	108
		Toluene	112
		Chlorobenzene	107

Surrogates	% Recovery	Limits
TOLUENE-D8	104	81 - 117
BROMOFLUOROBENZENE	98	74 - 121
1,2-DICHLOROETHANE-D4	105	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: AEW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1524-MSD  
 SAMPLE DATE: 11/04/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033  
 UNITS: % REC

	Result		Result
Phenol	62	Acenaphthene	115
2-Chlorophenol	74	4-Nitrophenol	74
1,4-Dichlorobenzene	64	Pentachlorophenol	76
N-Nitroso-di-n-propylamine	85	Pyrene	90
1,2,4-Trichlorobenzene	84		
4-Chloro-3-methylphenol	83		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	73	23 - 120
2-Fluorobiphenyl	84	30 - 115
Terphenyl-D14	75	18 - 137
Phenol-D5	60	24 - 113
2-Fluorophenol	52	25 - 121
2,4,6-Tribromophenol	82	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1524-MSD**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **91.7431**  
 UNITS: **% REC**

	Result	Method Reference	Analysis Date
Arsenic	93.3	7060	11/19/93
Aluminum	1360	6010	11/18/93
Barium	0	6010	11/18/93
Beryllium	87	6010	11/18/93
Cadmium	86	6010	11/18/93
Chromium	97	6010	11/18/93
Copper	91	6010	11/18/93
Iron	763	6010	11/18/93
Nickel	92	6010	11/18/93
Lead	0	7421	11/19/93
Mercury	114	7471	11/19/93
Silver	85	6010	11/18/93
Zinc	93	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

**Referenced notes for these results:**

Matrix spike outside control limits due to matrix interference on aluminum, barium and iron analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

% RPD for matrix spikes also outside control limits due to matrix interference on barium analysis by ICPEs. LCS / LCSD results and method Quality Control were acceptable.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

SAMPLE ID: A1525  
SAMPLE DATE: 11/04/93 13:15:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.098U	0.098 MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684

409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1525  
 SAMPLE DATE: 11/04/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	1.7	J#	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.4	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	5.7	JB	100	Benzene	2.0	J#	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	2.0	J#	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	2.2	J#	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	2.1	J#	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	102	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	101	70 - 120

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

**Referenced notes for these results:**

#Trace levels of spiking compounds were seen below PQL due to possible carryover.

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1525**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 EXTRACTION DATE: **11/09/93**  
 ANALYSIS DATE: **11/14/93**  
 DILUTION FACTOR: **0.033**

UNITS:	MG/KG	Reporting				Reporting			
		Result	Qual	Limit		Result	Qual	Limit	
		Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
		bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
		2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
		1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
		1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
		Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
		1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
		2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
		bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
		Methylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
		N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
		Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
		Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
		Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
		2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
		2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
		Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
		bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
		2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
		1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
		Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
		4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
		Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
		4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
		2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
		Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
		2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.25	J	0.330
		2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
		2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
		2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
		Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
		Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
						Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: ABN HSL GC/MS Extractables  
METHOD REFERENCE: EPA8270

SAMPLE ID: A1525  
SAMPLE DATE: 11/04/93  
SAMPLE MATRIX: SOIL

Surrogates	% Recovery	Limits
Nitrobenzene-D5	81	23 - 120
2-Fluorobiphenyl	86	30 - 115
Terphenyl-D14	78	18 - 137
Phenol-D5	63	24 - 113
2-Fluorophenol	52	25 - 121
2,4,6-Tribromophenol	77	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1525**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **96.1538**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	4.5	N	0.92	7060	11/19/93
Aluminum	8600	*N	19	6010	11/18/93
Barium	940	*N	19	6010	11/18/93
Beryllium	1.3		0.48	6010	11/18/93
Cadmium	0.77		0.48	6010	11/18/93
Chromium	13	*	0.96	6010	11/18/93
Copper	11		2.4	6010	11/18/93
Iron	14000	*N	9.6	6010	11/18/93
Nickel	20	*	3.8	6010	11/18/93
Lead	8.4	N	1.1	7421	11/19/93
Mercury	0.021	U	0.021	7471	11/19/93
Silver	0.96	U	0.96	6010	11/18/93
Zinc	20		1.9	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-11-077

409832-003-01

SAMPLE ID: A1526  
SAMPLE DATE: 11/04/93 13:23:00  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.10U	0.10	MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1526  
 SAMPLE DATE: 11/04/93  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/13/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.0	JB	10	1,1,2-Trichloroethane	5	U	5
Acetone	6.0	JB	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	103	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	104	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1526  
 SAMPLE DATE: 11/04/93  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033

	UNITS: MG/KG	Reporting			Reporting	
		Result	Qual Limit		Result	Qual Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U 0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U 0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U 0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U 0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U 0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U 0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U 0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U 0.330
bis(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U 0.330
1-Methylphenol	0.330	U	0.330	Fluorene	0.330	U 0.330
n-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U 0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U 0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U 0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U 0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U 0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U 0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U 0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U 0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U 0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U 0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U 0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U 0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U 0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U 0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U 0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U 0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.18	J 0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U 0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U 0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U 0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U 0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U 0.330
				Benzo(g,h,i)perylene	0.330	U 0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: **ARN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1526**  
SAMPLE DATE: **11/04/93**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	74	23 - 120
2-Fluorobiphenyl	82	30 - 115
Terphenyl-D14	76	18 - 137
Phenol-D5	64	24 - 113
2-Fluorophenol	54	25 - 121
2,4,6-Tribromophenol	78	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1526**  
 SAMPLE DATE: **11/04/93**  
 SAMPLE MATRIX: **SOIL**  
 DILUTION FACTOR (6010): **101.010**  
 UNITS: **MG/KG**

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	2.0	N	1.0	7060	11/19/93
Aluminum	8400	*N	20	6010	11/18/93
Barium	95	*N	20	6010	11/18/93
Beryllium	0.96		0.51	6010	11/18/93
Cadmium	0.51	U	0.51	6010	11/18/93
Chromium	13	*	1.0	6010	11/18/93
Copper	7.8		2.5	6010	11/18/93
Iron	11000	*N	10	6010	11/18/93
Nickel	15	*	4.0	6010	11/18/93
Lead	4.8	N	0.31	7421	11/19/93
Mercury	0.027	U	0.027	7471	11/19/93
Silver	1.0	U	1.0	6010	11/18/93
Zinc	18		2.0	6010	11/18/93

**Data qualifier key:**

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1523  
 SAMPLE DATE: 10/21/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	94	88 - 110
BROMOFLUOROBENZENE	104	86 - 115
1,2-DICHLOROETHANE-D4	98	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

SAMPLE ID: LAB BLANK  
SAMPLE DATE:  
SAMPLE MATRIX: SOIL

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>	<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u> <u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Chromium VI		0.010U	0.010 MG/KG	11/17/93	EPA7196

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/KG

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	3.8	J	10	1,1,2-Trichloroethane	5	U	5
Acetone	4.7	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,2-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.5	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	100	81 - 117
BROMOFLUOROBENZENE	97	74 - 121
1,2-DICHLOROETHANE-D4	100	70 - 120

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 EXTRACTION DATE: 11/09/93  
 ANALYSIS DATE: 11/14/93  
 DILUTION FACTOR: 0.033  
 UNITS: MG/KG

	Result	Reporting			Result	Reporting	
		Qual	Limit			Qual	Limit
Phenol	0.330	U	0.330	2,6-Dinitrotoluene	0.330	U	0.330
bis(2-Chloroethyl)ether	0.330	U	0.330	3-Nitroaniline	0.825	U	0.825
2-Chlorophenol	0.330	U	0.330	Acenaphthene	0.330	U	0.330
1,3-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrophenol	0.825	U	0.825
1,4-Dichlorobenzene	0.330	U	0.330	4-Nitrophenol	0.825	U	0.825
Benzyl alcohol	0.330	U	0.330	Dibenzofuran	0.330	U	0.330
1,2-Dichlorobenzene	0.330	U	0.330	2,4-Dinitrotoluene	0.330	U	0.330
2-Methylphenol	0.330	U	0.330	Diethylphthalate	0.330	U	0.330
(2-Chloroisopropyl)ether	0.330	U	0.330	4-Chlorophenyl-phenylether	0.330	U	0.330
ethylphenol	0.330	U	0.330	Fluorene	0.330	U	0.330
N-Nitroso-di-n-propylamine	0.330	U	0.330	4-Nitroaniline	0.825	U	0.825
Hexachloroethane	0.330	U	0.330	4,6-Dinitro-2-methylphenol	0.825	U	0.825
Nitrobenzene	0.330	U	0.330	N-Nitrosodiphenylamine (1)	0.330	U	0.330
Isophorone	0.330	U	0.330	4-Bromophenyl-phenylether	0.330	U	0.330
2-Nitrophenol	0.330	U	0.330	Hexachlorobenzene	0.330	U	0.330
2,4-Dimethylphenol	0.330	U	0.330	Pentachlorophenol	0.825	U	0.825
Benzoic Acid	0.330	U	0.330	Phenanthrene	0.330	U	0.330
bis(2-Chloroethoxy)methane	0.330	U	0.330	Anthracene	0.330	U	0.330
2,4-Dichlorophenol	0.330	U	0.330	Di-n-butylphthalate	0.330	U	0.330
1,2,4-Trichlorobenzene	0.330	U	0.330	Fluoranthene	0.330	U	0.330
Naphthalene	0.330	U	0.330	Pyrene	0.330	U	0.330
4-Chloroaniline	0.330	U	0.330	Butylbenzylphthalate	0.330	U	0.330
Hexachlorobutadiene	0.330	U	0.330	3,3'-Dichlorobenzidine	0.330	U	0.330
4-Chloro-3-methylphenol	0.330	U	0.330	Benzo(a)anthracene	0.330	U	0.330
2-Methylnaphthalene	0.330	U	0.330	Chrysene	0.330	U	0.330
Hexachlorocyclopentadiene	0.330	U	0.330	bis(2-Ethylhexyl)phthalate	0.330	U	0.330
2,4,6-Trichlorophenol	0.330	U	0.330	Di-n-octylphthalate	0.330	U	0.330
2,4,5-Trichlorophenol	0.825	U	0.825	Benzo(b)fluoranthene	0.330	U	0.330
2-Chloronaphthalene	0.330	U	0.330	Benzo(k)fluoranthene	0.330	U	0.330
2-Nitroaniline	0.825	U	0.825	Benzo(a)pyrene	0.330	U	0.330
Dimethylphthalate	0.330	U	0.330	Indeno(1,2,3-cd)pyrene	0.330	U	0.330
Acenaphthylene	0.330	U	0.330	Dibenzo(a,h)anthracene	0.330	U	0.330
				Benzo(g,h,i)perylene	0.330	U	0.330

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK**  
SAMPLE DATE: **not spec**  
SAMPLE MATRIX: **SOIL**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	51	23 - 120
2-Fluorobiphenyl	69	30 - 115
Terphenyl-D14	78	18 - 137
Phenol-D5	51	24 - 113
2-Fluorophenol	41	25 - 121
2,4,6-Tribromcphenol	69	19 - 122

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: Metals  
 METHOD REFERENCE: EPA6010

SAMPLE ID: LAB BLANK  
 SAMPLE DATE: not spec  
 SAMPLE MATRIX: SOIL  
 DILUTION FACTOR (6010): 1.0  
 UNITS: MG/KG

	Result	Result Qual	Reporting Limit	Method Reference	Analysis Date
Arsenic	0.010	U	0.010	7060	11/19/93
Aluminum	0.23		0.20	6010	11/18/93
Barium	0.20	U	0.20	6010	11/18/93
Beryllium	0.0050	U	0.0050	6010	11/18/93
Cadmium	0.0050	U	0.0050	6010	11/18/93
Chromium	0.010	U	0.010	6010	11/18/93
Copper	0.025	U	0.025	6010	11/18/93
Iron	0.10	U	0.10	6010	11/18/93
Nickel	0.040	U	0.040	6010	11/18/93
Lead	0.0030	U	0.0030	7421	11/19/93
Mercury	0.00020	U	0.00020	7471	11/19/93
Silver	0.010	U	0.010	6010	11/18/93
Zinc	0.020	U	0.020	6010	11/18/93

Data qualifier key:

- E - estimated value
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

NOTE: Dilution Factor applies to Method 6010 only.

Company: IT CORPORATION  
 Date: 12/10/93  
 Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-11-077

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE:  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 11/12/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	96	88 - 110
BROMOFLUOROBENZENE	107	86 - 115
1,2-DICHLOROETHANE-D4	100	76 - 114

Data Qualifier Key:

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Page: 33 of 36

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-11-077

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Referenced notes for this work order:

B311077

Prep blank for ICPES analysis had aluminum concentration greater than the PQL (230 ppb). This concentration was less than 5% of all batched soil samples' concentration.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
Work Order: B3-11-077  
409832-003-01

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME **ICP Metals**

TEST CODE **6010**

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME **Hazardous Substance Vols.**

TEST CODE **8240TK**

Hazardous Substance  
List Volatiles

Method 8240, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME **ABN HSL GC/MS Extractables**

TEST CODE **8270TK**

Hazardous Substance  
List Extractables

Method 8270, SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME **Arsenic - Graphite Furnace**

TEST CODE **AS\_GF**

Arsenic  
Graphite  
Furnace

Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME **Cation Exchange Capacity**

TEST CODE **CEC\_A**

Cation exchange  
Capacity

Part 2: Chemical and microbiological properties method 57-3. American Society of Agronomy, Methods of soil Analysis 2nd Edition.

TEST NAME **Chromium VI**

TEST CODE **CR\_VI**

Chromium VI

Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

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TEST NAME Grain Size Distriubtion TEST CODE **GRAIN**

Method not available.

TEST NAME **Mercury** TEST CODE **HG\_AA**

Mercury

Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Method 245.5-"Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME **Metals** TEST CODE **ICPTK2**

Method not available.

TEST NAME **Moisture Content** TEST CODE **MOIS\_G**

Method not available.

TEST NAME **Lead - Graphite Furnace** TEST CODE **PB\_GF**

Lead

Graphite  
Furnace

EPA 7421, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition.  
EPA 239.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME **Vertical Permeability** TEST CODE **V\_PERM**

Method not available.

Company: IT CORPORATION  
Date: 12/10/93  
Client Work ID: D.O.5001

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TEST NAME **GFAA Digestion - Soil** TEST CODE **Z3050F**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace/Flame AA analysis.

TEST NAME **ICPES Digestion - Soil** TEST CODE **Z3050P**

Soil Digestion Method 3050, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for ICPES analysis. Equivalent to Method 3050A, SW-846 Update I, July 1992.



**INTERNATIONAL TECHNOLOGY CORPORATION**  
**ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD \***

6311071  
 Reference Document 314069  
 Page 1 of 1

White: To accompany samples Yellow: Field copy \*See back of form for special instructions

Project Name/No. 1 TAFB 409832.003 Samples Shipment Date 7 11-4-93  
 Sample Team Members 2 L. Rodriguez, H. Wilson Lab Destination 8 ITAS-Austin  
 Profit Center No. 3 3527 Lab Contact 9 Karmen Dean  
 Project Manager 4 Jimmy Taylor Project Contact/Phone 12 Dan McCreagor  
 Purchase Order No. 6 409832.003 Carrier/Waybill No. 13 Fed Ex 8444166065  
 Required Report Date 11 11-19-93 Report to: 10 Tim Jennings IT-Austin

**ONE CONTAINER PER LINE**

Sample Number	Sample Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-19 preservative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1523	2-68A Trip Blank	11-4-93 1300	Glass vial	40ml	HCl	VDA 8240	Good	B324400
A1524	SB 2-68A Soil	11-4-93/1305	Glass	125 ml	Ice	VDA 8240		
A1524 (MS ASD)	Soil SB 2-68A	11-4-93/1305		500 ml		Metals 6010/7000 SVOC 8270	Rec 2501	
A1525	Soil SB 2-68A	1315		125 ml		VDA 8240		
A1525	SB-2-68A/10'	1315		500 ml		Metals 6010/7000 SVOC 8270		
A1526	SB 2-68A/17'	1323		125 ml		VDA 8240		
A1526	SB 2-68A/17'	1323		500 ml		Metals 6010/7000 SVOC 8270		
2-68A14.5	Geotek Soil 14.5'	1318	551 ml (3)	518cc		* Comments		

Special Instructions: 23

Possible Hazard Identification: 24  
 Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Turnaround Time Required: 26  
 Normal  Rush

QC Level: 27  
 I.  II.  III.

Project Specific (specify):

Sample Disposal: 25  
 Return to Client  Disposal by Lab  Archive (mos.)

1. Relinquished by *Jimmy Rodriguez* Date: 11-4-93 Time: 1640  
 (Signature/Affiliation)

2. Relinquished by \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 (Signature/Affiliation)

3. Relinquished by \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 (Signature/Affiliation)

Comments: 29 Amt Test for Cation Exchange Capacity, Moisture Content, grain size distribution, water retention potential

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : A1524

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
01B						
	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	96.2
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	9.9
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	111
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	192

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : A1524-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
02B	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	112
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	10.1
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	102
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	449

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : A1524-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B						
	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	101
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	10.2
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	109
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	101

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : A1525

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
04B	- -					
	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	91.7
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	9.8
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	105
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	367

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : A1526

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B						
	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	102
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	10.2
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	133
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	102

Auxiliary Data Summary

12/09/93

Work order : B311077

Sample ID : LAB BLANK

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08B						
	Arsenic	B311077-08B	11163050F1	11/16/93	11/19/93	1.0
	Chromium VI	B311077-08B	1117CR_VI1	11/17/93	11/17/93	1.0
	Mercury	B311077-08B	1119HGAA2	11/19/93	11/19/93	1.0
	Lead	B311077-08B	11163050F1	11/16/93	11/19/93	1.0



Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

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409832-003-01 Work Order: B3-12-154

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Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
LAB BLANK #2	B3-12-154-12

II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. ITAS-Austin reserves the right to control report production except in whole.

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

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 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1598  
 SAMPLE DATE: 12/02/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/16/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	97	88 - 110
BROMOFLUOROBENZENE	99	86 - 115
1,2-DICHLOROETHANE-D4	106	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
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 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1591  
 SAMPLE DATE: 12/09/93 15:00:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u>	<u>Method</u>
	<u>Ref</u>		<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>Reference</u>
Alkalinity, Titrimetric		430	10	MG/L as CaCO3	12/15/93	EPA310_1
TPH - IR		1.1U	1.1	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		110	10	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		0.067	0.050	MG/L	12/14/93	EPA353_2
Silica		8.6	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		18	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		690	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		2.5	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids		140	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
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 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1591  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	96	88 - 110
BROMOFLUOROBENZENE	94	86 - 115
1,2-DICHLOROETHANE-D4	105	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

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 Work Order: B3-12-154  
 409832-003-01

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1591  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 12/15/93  
 ANALYSIS DATE: 12/20/93  
 DILUTION FACTOR: 1.0

UNITS:	UG/L	Reporting			Reporting		
		Result	Qual	Limit	Result	Qual	Limit
phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
1,4-Dichlorobenzene	10	U	10	4-Nitrophenol	25	U	25
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10
2-Methylphenol	10	U	10	Diethylphthalate	2.0	J	10
bis(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
-Methylphenol	10	U	10	Fluorene	10	U	10
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
Benzoic Acid	10	U	10	Phenanthrene	10	U	10
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
Naphthalene	10	U	10	Pyrene	10	U	10
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	13		10
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
				Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
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409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **KPA8270**

SAMPLE ID: **A1591**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	89	35 - 114
2-Fluorobiphenyl	89	43 - 116
Terphenyl-D14	84	33 - 141
Phenol-D5	80	10 - 94
2-Fluorophenol	69	21 - 100
2,4,6-Tribromophenol	88	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
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409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1591**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: 12/16/93  
ANALYSIS DATE: **01/05/94**  
DILUTION FACTOR: 1.00000  
UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	2.9	N	0.20
Barium	0.70	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	67	N	5.0
Chromium	0.010	UN	0.010
Copper	0.025	UN	0.025
Iron	3.5	N	0.10
Magnesium	27	N	5.0
Manganese	0.14	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	98	N	5.0
Zinc	0.020	UN	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
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 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1592  
 SAMPLE DATE: 12/09/93 15:20:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Alkalinity, Titrimetric		410	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		1.1U	1.1	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		52	5.0	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		4.9	0.50	MG/L	12/14/93	EPA353_2
Silica		7.2	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		9.4	5.0	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		490	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		1.0U	1.0	MG/L	12/21/93	EPA415_1
Total Suspended Solids		62	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1592  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	1.8	J	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	29		5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	49		5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	96	88 - 110
BROMOFLUOROBENZENE	94	86 - 115
1,2-DICHLOROETHANE-D4	98	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **ABW HSL GC/MS Extractables**  
 METHOD REFERENCE: **EP8270**

SAMPLE ID: **A1592**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/21/93**  
 DILUTION FACTOR: **1.0**

UNITS:	UG/L	Reporting			Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
1,4-Dichlorobenzene	10	U	10	4-Nitrophenol	25	U	25
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10
2-Methylphenol	10	U	10	Diethylphthalate	10	U	10
bis(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
4-Methylphenol	10	U	10	Fluorene	10	U	10
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
Benzoic Acid	10	U	10	Phenanthrene	10	U	10
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
Naphthalene	10	U	10	Pyrene	10	U	10
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
				Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1592**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	88	35 - 114
2-Fluorobiphenyl	89	43 - 116
Terphenyl-D14	80	33 - 141
Phenol-D5	82	10 - 94
2-Fluorophenol	74	21 - 100
2,4,6-Tribromophenol	96	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1592**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 PREP DATE: **12/16/93**  
 ANALYSIS DATE: **01/05/94**  
 DILUTION FACTOR: **1.00000**  
 UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	1.1	N	0.20
Barium	0.53	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	60	N	5.0
Chromium	0.018	N	0.010
Copper	0.025	UN	0.025
Iron	1.9	N	0.10
Magnesium	34	N	5.0
Manganese	0.025	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	43	N	5.0
Zinc	0.023	N	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1593  
 SAMPLE DATE: 12/09/93 15:50:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
			<u>Limit</u>	<u>Units</u>		
Alkalinity, Titrimetric		420	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		0.97U	0.97	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		110	25	MG/L	01/10/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		7.4	0.50	MG/L	12/14/93	EPA353_2
Silica		6.1	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		20	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		690	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		2.8	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids		270	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-12-154  
 409832-003-01

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1593  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	46		5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	6.4		5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	2.2	J	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	99		5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	21		5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	20		5	4-Methyl-2-pentanone	50	U	50
Chloroform	6.2		5	Tetrachloroethene	91		5
1,2-Dichloroethane	45		5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	16		5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	99	88 - 110
BROMOFLUOROBENZENE	98	86 - 115
1,2-DICHLOROETHANE-D4	101	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-12-154  
 409832-003-01

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1593**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/21/93**  
 DILUTION FACTOR: **1.0**  
 UNITS: **UG/L**

	Result	Qual	Reporting Limit		Result	Qual	Reporting Limit
Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
1,4-Dichlorobenzene	10	U	10	4-Nitrophenol	25	U	25
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
1,2-Dichlorobenzene	1.8	J	10	2,4-Dinitrotoluene	10	U	10
2-Methylphenol	10	U	10	Diethylphthalate	10	U	10
is(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
-Methylphenol	10	U	10	Fluorene	10	U	10
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
Benzoic Acid	10	U	10	Phenanthrene	10	U	10
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
Naphthalene	10	U	10	Pyrene	10	U	10
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
				Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1593**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	83	35 - 114
2-Fluorobiphenyl	83	43 - 116
Terphenyl-D14	78	33 - 141
Phenol-D5	78	10 - 94
2-Fluorophenol	71	21 - 100
2,4,6-Tribromophenol	86	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 Work Order: B3-12-154  
 409832-003-01

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1593**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 PREP DATE: **12/16/93**  
 ANALYSIS DATE: **01/05/94**  
 DILUTION FACTOR: **1.00000**  
 UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	6.2	N	0.20
Barium	0.75	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	67	N	5.0
Chromium	0.012	N	0.010
Copper	0.025	UN	0.025
Iron	7.1	N	0.10
Magnesium	35	N	5.0
Manganese	0.34	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	76	N	5.0
Zinc	0.020	UN	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1594  
 SAMPLE DATE: 12/09/93 15:50:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting</u>		<u>Date Analyzed</u>	<u>Method Reference</u>
			<u>Limit</u>	<u>Units</u>		
Alkalinity, Titrimetric		390	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		0.96U	0.96	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		110	10	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		7.4	0.50	MG/L	12/14/93	EPA353_2
Silica		5.6	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		20	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		670	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		3.4	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids		380	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1594  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	47		5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	33		5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	2.3	J	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	100		5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	21		5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	21		5	4-Methyl-2-pentanone	50	U	50
Chloroform	6.4		5	Tetrachloroethene	89		5
1,2-Dichloroethane	45		5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	2.1	J	100	Toluene	8.1		5
1,1,1-Trichloroethane	17		5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	95	88 - 110
BROMOFLUOROBENZENE	96	86 - 115
1,2-DICHLOROETHANE-D4	103	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1594**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/21/93**  
 DILUTION FACTOR: **1.0**

	UNITS:	UG/L	Reporting				UG/L	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		10	U	10	2,6-Dinitrotoluene	10	U	10		
bis(2-Chloroethyl)ether		10	U	10	3-Nitroaniline	25	U	25		
2-Chlorophenol		10	U	10	Acenaphthene	10	U	10		
1,3-Dichlorobenzene		10	U	10	2,4-Dinitrophenol	25	U	25		
1,4-Dichlorobenzene		10	U	10	4-Nitrophenol	25	U	25		
Benzyl alcohol		10	U	10	Dibenzofuran	10	U	10		
1,2-Dichlorobenzene		1.9	J	10	2,4-Dinitrotoluene	10	U	10		
2-Methylphenol		10	U	10	Diethylphthalate	10	U	10		
is(2-Chloroisopropyl)ether		10	U	10	4-Chlorophenyl-phenylether	10	U	10		
2-Methylphenol		10	U	10	Fluorene	10	U	10		
N-Nitroso-di-n-propylamine		10	U	10	4-Nitroaniline	10	U	10		
Hexachloroethane		10	U	10	4,6-Dinitro-2-methylphenol	25	U	25		
Nitrobenzene		10	U	10	N-Nitrosodiphenylamine (1)	10	U	10		
Isophorone		10	U	10	4-Bromophenyl-phenylether	10	U	10		
2-Nitrophenol		10	U	10	Hexachlorobenzene	10	U	10		
2,4-Dimethylphenol		10	U	10	Pentachlorophenol	25	U	25		
Benzoic Acid		10	U	10	Phenanthrene	10	U	10		
bis(2-Chloroethoxy)methane		10	U	10	Anthracene	10	U	10		
2,4-Dichlorophenol		10	U	10	Di-n-butylphthalate	10	U	10		
1,2,4-Trichlorobenzene		10	U	10	Fluoranthene	10	U	10		
Naphthalene		10	U	10	Pyrene	10	U	10		
4-Chloroaniline		10	U	10	Butylbenzylphthalate	10	U	10		
Hexachlorobutadiene		10	U	10	3,3'-Dichlorobenzidine	10	U	10		
4-Chloro-3-methylphenol		10	U	10	Benzo(a)anthracene	10	U	10		
2-Methylnaphthalene		10	U	10	Chrysene	10	U	10		
Hexachlorocyclopentadiene		10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10		
2,4,6-Trichlorophenol		10	U	10	Di-n-octylphthalate	10	U	10		
2,4,5-Trichlorophenol		10	U	10	Benzo(b)fluoranthene	10	U	10		
2-Chloronaphthalene		10	U	10	Benzo(k)fluoranthene	10	U	10		
2-Nitroaniline		25	U	25	Benzo(a)pyrene	10	U	10		
Dimethylphthalate		10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10		
Acenaphthylene		10	U	10	Dibenzo(a,h)anthracene	10	U	10		
					Benzo(g,h,i)perylene	10	U	10		

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1594**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	83	35 - 114
2-Fluorobiphenyl	85	43 - 116
Terphenyl-D14	78	33 - 141
Phenol-D5	83	10 - 94
2-Fluorophenol	71	21 - 100
2,4,6-Tribromophenol	93	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
 METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1594**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 PREP DATE: **12/16/93**  
 ANALYSIS DATE: **01/05/94**  
 DILUTION FACTOR: **1.00000**  
 UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	6.4	N	0.20
Barium	0.78	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	71	N	5.0
Chromium	0.012	N	0.010
Copper	0.025	UN	0.025
Iron	6.9	N	0.10
Magnesium	37	N	5.0
Manganese	0.33	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	81	N	5.0
Zinc	0.020	UN	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1595  
 SAMPLE DATE: 12/09/93 16:30:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Alkalinity, Titrimetric		400	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		0.5U	0.5	MG/L	12/20/93	EPA418_1
Phenolics		0.042	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		89	20	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		36	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.014	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		ND	0.050	MG/L	12/14/93	EPA353_2
Silica		11	5.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		11	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		530	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		4.8	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids	1	17	10	MG/L	12/28/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Referenced notes for these results:

- 1 Original analysis high compared to duplicate. The sample and duplicate were rerun 12/28/93. The results from the rerun are reported.

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1595  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 10  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	100	U	100	1,2-Dichloropropane	37	J	50
Bromomethane	100	U	100	trans-1,3-Dichloropropene	50	U	50
Vinyl chloride	100	U	100	Trichloroethene	48	J	50
Chloroethane	100	U	100	Chlorodibromomethane	50	U	50
Methylene chloride	42	J	100	1,1,2-Trichloroethane	50	U	50
Acetone	1000	U	1000	Benzene	280		50
Carbon disulfide	50	U	50	cis-1,3-Dichloropropene	50	U	50
1,1-Dichloroethene	50	U	50	2-Chloroethylvinyl ether	100	U	100
1,1-Dichloroethane	50	U	50	Bromoform	50	U	50
trans-1,2-Dichloroethene	50	U	50	2-Hexanone	500	U	500
cis-1,2-Dichloroethene	120		50	4-Methyl-2-pentanone	500	U	500
Chloroform	50	U	50	Tetrachloroethene	50	U	50
1,2-Dichloroethane	13000	D	500	1,1,2,2-Tetrachloroethane	50	U	50
2-Butanone	1000	U	1000	Toluene	20	J	50
1,1,1-Trichloroethane	50	U	50	Chlorobenzene	50	U	50
Carbon tetrachloride	50	U	50	Ethylbenzene	25	J	50
Vinyl acetate	100	U	100	Styrene	50	U	50
Dichlorobromomethane	50	U	50	Xylenes, total	28	J	50

Surrogates	% Recovery	Limits
TOLUENE-D8	97	88 - 110
BROMOFLUOROBENZENE	102	86 - 115
1,2-DICHLOROETHANE-D4	104	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1595  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 12/15/93  
 ANALYSIS DATE: 12/21/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
1,4-Dichlorobenzene	10	U	10	4-Nitrophenol	25	U	25
Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10
2-Methylphenol	34		10	Diethylphthalate	10	U	10
bis(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
4-Methylphenol	1.4	J	10	Fluorene	10	U	10
N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
Benzoic Acid	10	U	10	Phenanthrene	10	U	10
bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
Naphthalene	4.2	J	10	Pyrene	10	U	10
4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10
2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
				Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1595**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	87	35 - 114
2-Fluorobiphenyl	86	43 - 116
Terphenyl-D14	76	33 - 141
Phenol-D5	90	10 - 94
2-Fluorophenol	78	21 - 100
2,4,6-Tribromophenol	98	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1595**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: **12/16/93**  
ANALYSIS DATE: **01/05/94**  
DILUTION FACTOR: **1.00000**  
UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	0.20	UN	0.20
Barium	1.4	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	66	N	5.0
Chromium	0.010	UN	0.010
Copper	0.025	UN	0.025
Iron	0.62	N	0.10
Magnesium	36	N	5.0
Manganese	0.63	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	48	N	5.0
Zinc	0.020	UN	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1595-MS  
 SAMPLE DATE: 12/09/93 16:30:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Alkalinity, Titrimetric	1	400	10	MG/L AS CACO3	12/15/93	EPA310_1
TPH - IR		95		% REC	12/20/93	EPA418_1
Phenolics		78		% REC	01/06/94	EPA9066
Chloride by Ion Chrom.		108		% REC	01/05/94	EPA300_0
Chemical Oxygen Demand		91		% REC	12/28/93	EPA410_4
Chromium VI		92		% REC	12/10/93	EPA7196
Nitrate and Nitrite		101		% REC	12/14/93	EPA353_2
Silica		101		% REC	12/29/93	370_1
Sulfate by Ion Chrom.		87		% REC	01/05/94	EPA300_0
Total Dissolved Solids	2	530	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		117		% REC	01/07/94	EPA351_3
Total Organic Carbon		108		% REC	12/20/93	EPA415_1
Total Suspended Solids	3	16	10	MG/L	12/17/93	EPA160_2
Total Phosphorus		100		% REC	01/07/94	EPA365_3

Referenced notes for these results:

- 1 Duplicate analysis performed in lieu of a matrix spike.
- 2 Duplicate analysis performed in lieu of a matrix spike.
- 3 Duplicate analysis performed in lieu of a matrix spike.

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1591-MS  
SAMPLE DATE: 12/09/93  
SAMPLE MATRIX: WATER  
ANALYSIS DATE: 12/17/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	91	Trichloroethene	90
		Benzene	92
		Toluene	98
		Chlorobenzene	100

Surrogates	% Recovery	Limits
TOLUENE-D8	107	88 - 110
BROMOFLUOROBENZENE	99	86 - 115
1,2-DICHLOROETHANE-D4	99	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: ABN HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1595-MS  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 12/15/93  
 ANALYSIS DATE: 12/21/93  
 DILUTION FACTOR: 1.0  
 UNITS: % REC

	Result		Result
Phenol	81	Acenaphthene	92
2-Chlorophenol	87	4-Nitrophenol	78
1,4-Dichlorobenzene	78	2,4-Dinitrotoluene	77
N-Nitroso-di-n-propylamine	72	Pentachlorophenol	110
1,2,4-Trichlorobenzene	84	Pyrene	99
4-Chloro-3-methylphenol	91		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	88	35 - 114
2-Fluorobiphenyl	83	43 - 116
Terphenyl-D14	87	33 - 141
Phenol-D5	79	10 - 94
2-Fluorophenol	78	21 - 100
2,4,6-Tribromophenol	94	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1595-MS**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: 12/16/93  
ANALYSIS DATE: **01/05/94**  
DILUTION FACTOR: 1.00000  
UNITS: % REC

Result

Aluminum	79
Barium	87
Cadmium	70
Calcium	52
Chromium	72
Copper	69
Iron	75
Magnesium	65
Manganese	64
Nickel	68
Potassium	77
Selenium	72
Silver	71
Sodium	63
Zinc	70

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

**Referenced notes for these results:**

Matrix spike outside of control limits due to matrix interference for the analysis of silver, aluminum, cadmium, chromium, copper, iron, potassium, manganese, nickle, selenium, and zinc by ICPES. LCS / LCSD results and method Quality Control within acceptance limits.

Matrix spike and % RPD for matrix spikes outside of control limits due to matrix interference for the analysis of calcium, magnesium, and sodium by ICPES. LCS / LCSD results and method Quality Control within acceptance limits.

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1595-MSD  
 SAMPLE DATE: 12/09/93 16:30:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note Ref</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Method Reference</u>
Alkalinity, Titrimetric	1	410	10	MG/L AS CACO3	12/15/93	EPA310_1
TPH - IR		100		% REC	12/20/93	EPA418_1
Phenolics		88		% REC	01/06/94	EPA9066
Chloride by Ion Chrom.		115		% REC	01/05/94	EPA300_0
Chemical Oxygen Demand		86		% REC	12/28/93	EPA410_4
Chromium VI		94		% REC	12/10/93	EPA7196
Nitrate and Nitrite		96		% REC	12/14/93	EPA353_2
Silica		103		% REC	12/29/93	370_1
Sulfate by Ion Chrom.		85		% REC	01/05/94	EPA300_0
Total Dissolved Solids	2	550	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		118		% REC	01/07/94	EPA351_3
Total Organic Carbon		105		% REC	12/20/93	EPA415_1
Total Suspended Solids	3	14	10	MG/L	12/17/93	EPA160_2
Total Phosphorus		98		% REC	01/07/94	EPA365_3

Referenced notes for these results:

- 1 Duplicate analysis performed in lieu of a matrix spike.
- 2 Duplicate analysis performed in lieu of a matrix spike.
- 3 Duplicate analysis performed in lieu of a matrix spike.

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
METHOD REFERENCE: EPA8240

SAMPLE ID: A1591-MSD  
SAMPLE DATE: 12/09/93  
SAMPLE MATRIX: WATER  
ANALYSIS DATE: 12/17/93  
DILUTION FACTOR: 1.0  
UNITS: % REC

	Result		Result
1,1-Dichloroethene	87	Trichloroethene	86
		Benzene	90
		Toluene	95
		Chlorobenzene	99

Surrogates	% Recovery	Limits
TOLUENE-D8	107	88 - 110
BROMOFLUOROBENZENE	99	86 - 115
1,2-DICHLOROETHANE-D4	96	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1595-MSD**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/21/93**  
 DILUTION FACTOR: **1.0**  
 UNITS: **% REC**

	Result		Result
Phenol	81	Acenaphthene	96
2-Chlorophenol	88	4-Nitrophenol	82
1,4-Dichlorobenzene	78	2,4-Dinitrotoluene	84
N-Nitroso-di-n-propylamine	74	Pentachlorophenol	109
1,2,4-Trichlorobenzene	89	Pyrene	102
4-Chloro-3-methylphenol	95		

Surrogates	% Recovery	Limits
Nitrobenzene-D5	91	35 - 114
2-Fluorobiphenyl	86	43 - 116
Terphenyl-D14	88	33 - 141
Phenol-D5	82	10 - 94
2-Fluorophenol	78	21 - 100
2,4,6-Tribromophenol	97	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1595-MSD**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: 12/16/93  
ANALYSIS DATE: **01/05/94**  
DILUTION FACTOR: 1.00000  
UNITS: % **REC**

Result

Aluminum	87
Barium	112
Cadmium	76
Calcium	96
Chromium	78
Copper	76
Iron	82
Magnesium	92
Manganese	77
Nickel	74
Potassium	85
Selenium	74
Silver	77
Sodium	97
Zinc	76

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

**Referenced notes for these results:**

Matrix spike duplicate outside of control limits due to matrix interference for the analysis of silver, cadmium, chromium, copper, nickle, selenium, and zinc by ICPES. LCS / LCSD results and method Quality Control within acceptance limits.

The % RPD for matrix spikes outside of control limits for the analysis of barium, calcium, magnesium, and sodium by ICPES. LCS / LCSD results and method Quality Control within acceptance limits.

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1596  
 SAMPLE DATE: 12/09/93 17:10:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
			<u>Limit</u>	<u>Units</u>		
Alkalinity, Titrimetric		410	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		0.96U	0.96	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		110	10	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		3.1	0.50	MG/L	12/14/93	EPA353_2
Silica		8.1	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		17	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		630	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		1.4	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids		410	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.13	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1596  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	2.4	J	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	25	J	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	26		5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	2.5	J	5	4-Methyl-2-pentanone	50	U	50
Chloroform	6.2		5	Tetrachloroethene	98		5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	9.8		5	Chlorobenzene	5	U	5
Carbon tetrachloride	2.3	J	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	98	88 - 110
BROMOFLUOROBENZENE	99	86 - 115
1,2-DICHLOROETHANE-D4	106	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **KPA8270**

SAMPLE ID: **A1596**  
 SAMPLE DATE: **12/09/93**  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/21/93**  
 DILUTION FACTOR: **1.0**

UNITS:	UG/L	Reporting	Result	Qual	Limit	Reporting	Result	Qual	Limit	
			Phenol	10	U	10	2,6-Dinitrotoluene	10	U	10
			bis(2-Chloroethyl)ether	10	U	10	3-Nitroaniline	25	U	25
			2-Chlorophenol	10	U	10	Acenaphthene	10	U	10
			1,3-Dichlorobenzene	10	U	10	2,4-Dinitrophenol	25	U	25
			1,4-Dichlorobenzene	10	U	10	4-Nitrophenol	25	U	25
			Benzyl alcohol	10	U	10	Dibenzofuran	10	U	10
			1,2-Dichlorobenzene	10	U	10	2,4-Dinitrotoluene	10	U	10
			2-Methylphenol	10	U	10	Diethylphthalate	10	U	10
			bis(2-Chloroisopropyl)ether	10	U	10	4-Chlorophenyl-phenylether	10	U	10
			4-Methylphenol	10	U	10	Fluorene	10	U	10
			N-Nitroso-di-n-propylamine	10	U	10	4-Nitroaniline	10	U	10
			Hexachloroethane	10	U	10	4,6-Dinitro-2-methylphenol	25	U	25
			Nitrobenzene	10	U	10	N-Nitrosodiphenylamine (1)	10	U	10
			Isophorone	10	U	10	4-Bromophenyl-phenylether	10	U	10
			2-Nitrophenol	10	U	10	Hexachlorobenzene	10	U	10
			2,4-Dimethylphenol	10	U	10	Pentachlorophenol	25	U	25
			Benzoic Acid	10	U	10	Phenanthrene	10	U	10
			bis(2-Chloroethoxy)methane	10	U	10	Anthracene	10	U	10
			2,4-Dichlorophenol	10	U	10	Di-n-butylphthalate	10	U	10
			1,2,4-Trichlorobenzene	10	U	10	Fluoranthene	10	U	10
			Naphthalene	10	U	10	Pyrene	10	U	10
			4-Chloroaniline	10	U	10	Butylbenzylphthalate	10	U	10
			Hexachlorobutadiene	10	U	10	3,3'-Dichlorobenzidine	10	U	10
			4-Chloro-3-methylphenol	10	U	10	Benzo(a)anthracene	10	U	10
			2-Methylnaphthalene	10	U	10	Chrysene	10	U	10
			Hexachlorocyclopentadiene	10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10
			2,4,6-Trichlorophenol	10	U	10	Di-n-octylphthalate	10	U	10
			2,4,5-Trichlorophenol	10	U	10	Benzo(b)fluoranthene	10	U	10
			2-Chloronaphthalene	10	U	10	Benzo(k)fluoranthene	10	U	10
			2-Nitroaniline	25	U	25	Benzo(a)pyrene	10	U	10
			Dimethylphthalate	10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10
			Acenaphthylene	10	U	10	Dibenzo(a,h)anthracene	10	U	10
							Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **KPA8270**

SAMPLE ID: **A1596**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	88	35 - 114
2-Fluorobiphenyl	86	43 - 116
Terphenyl-D14	78	33 - 141
Phenol-D5	79	10 - 94
2-Fluorophenol	70	21 - 100
2,4,6-Tribromophenol	78	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1596**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: **12/16/93**  
ANALYSIS DATE: **01/06/94**  
DILUTION FACTOR: **1.00000**  
UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	13	N	0.20
Barium	3.5	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	88	N	5.0
Chromium	0.030	N	0.010
Copper	0.025	UN	0.025
Iron	18	N	0.10
Magnesium	45	N	5.0
Manganese	1.2	N	0.015
Nickel	0.040	UN	0.040
Potassium	5.0	UN	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	74	N	5.0
Zinc	0.033	N	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: A1597  
 SAMPLE DATE: 12/09/93 17:30:00  
 SAMPLE MATRIX: WATER

<u>Test Name</u>	<u>Note</u> <u>Ref</u>	<u>Result</u>	<u>Reporting</u> <u>Limit Units</u>		<u>Date</u> <u>Analyzed</u>	<u>Method</u> <u>Reference</u>
Alkalinity, Titrimetric		400	10	MG/L as CaCo3	12/15/93	EPA310_1
TPH - IR		1.3U	1.3	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		72	10	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		3.0	0.50	MG/L	12/14/93	EPA353_2
Silica		9.2	2.0	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		16	10	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		500	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		1.4	1.0	MG/L	12/20/93	EPA415_1
Total Suspended Solids		16	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: A1597  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/17/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	36		5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	3.2	J	5	4-Methyl-2-pentanone	50	U	50
Chloroform	510	D	25	Tetrachloroethene	5	U	5
1,2-Dichloroethane	86		5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	290	D	25	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	98	88 - 110
BROMOFLUOROBENZENE	97	86 - 115
1,2-DICHLOROETHANE-D4	90	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: ABW HSL GC/MS Extractables  
 METHOD REFERENCE: EPA8270

SAMPLE ID: A1597  
 SAMPLE DATE: 12/09/93  
 SAMPLE MATRIX: WATER  
 EXTRACTION DATE: 12/15/93  
 ANALYSIS DATE: 12/21/93  
 DILUTION FACTOR: 1.0

UNITS:	UG/L	Reporting	Reporting
	Result	Qual	Limit
Phenol	10	U	10
bis(2-Chloroethyl)ether	10	U	10
2-Chlorophenol	10	U	10
1,3-Dichlorobenzene	10	U	10
1,4-Dichlorobenzene	10	U	10
Benzyl alcohol	10	U	10
1,2-Dichlorobenzene	10	U	10
2-Methylphenol	10	U	10
bis(2-Chloroisopropyl)ether	10	U	10
4-Methylphenol	10	U	10
N-Nitroso-di-n-propylamine	10	U	10
Hexachloroethane	10	U	10
Nitrobenzene	10	U	10
Isophorone	10	U	10
2-Nitrophenol	10	U	10
2,4-Dimethylphenol	10	U	10
Benzoic Acid	10	U	10
bis(2-Chloroethoxy)methane	10	U	10
2,4-Dichlorophenol	10	U	10
1,2,4-Trichlorobenzene	10	U	10
Naphthalene	10	U	10
4-Chloroaniline	10	U	10
Hexachlorobutadiene	10	U	10
4-Chloro-3-methylphenol	10	U	10
2-Methylnaphthalene	10	U	10
Hexachlorocyclopentadiene	10	U	10
2,4,6-Trichlorophenol	10	U	10
2,4,5-Trichlorophenol	10	U	10
2-Chloronaphthalene	10	U	10
2-Nitroaniline	25	U	25
Dimethylphthalate	10	U	10
Acenaphthylene	10	U	10
2,6-Dinitrotoluene	10	U	10
3-Nitroaniline	25	U	25
Acenaphthene	10	U	10
2,4-Dinitrophenol	25	U	25
4-Nitrophenol	25	U	25
Dibenzofuran	10	U	10
2,4-Dinitrotoluene	10	U	10
Diethylphthalate	10	U	10
4-Chlorophenyl-phenylether	10	U	10
Fluorene	10	U	10
4-Nitroaniline	10	U	10
4,6-Dinitro-2-methylphenol	25	U	25
N-Nitrosodiphenylamine (1)	10	U	10
4-Bromophenyl-phenylether	10	U	10
Hexachlorobenzene	10	U	10
Pentachlorophenol	25	U	25
Phenanthrene	10	U	10
Anthracene	10	U	10
Di-n-butylphthalate	10	U	10
Fluoranthene	10	U	10
Pyrene	10	U	10
Butylbenzylphthalate	10	U	10
3,3'-Dichlorobenzidine	10	U	10
Benzo(a)anthracene	10	U	10
Chrysene	10	U	10
bis(2-Ethylhexyl)phthalate	10	U	10
Di-n-octylphthalate	10	U	10
Benzo(b)fluoranthene	10	U	10
Benzo(k)fluoranthene	10	U	10
Benzo(a)pyrene	10	U	10
Indeno(1,2,3-cd)pyrene	10	U	10
Dibenzo(a,h)anthracene	10	U	10
Benzo(g,h,i)perylene	10	U	10

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
METHOD REFERENCE: **EPA8270**

SAMPLE ID: **A1597**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	86	35 - 114
2-Fluorobiphenyl	82	43 - 116
Terphenyl-D14	79	33 - 141
Phenol-D5	82	10 - 94
2-Fluorophenol	72	21 - 100
2,4,6-Tribromophenol	88	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **A1597**  
SAMPLE DATE: **12/09/93**  
SAMPLE MATRIX: **WATER**  
PREP DATE: **12/16/93**  
ANALYSIS DATE: **01/06/94**  
DILUTION FACTOR: **1.00000**  
UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	0.72	N	0.20
Barium	0.54	N	0.20
Cadmium	0.0050	UN	0.0050
Calcium	56	N	5.0
Chromium	0.010	UN	0.010
Copper	0.025	UN	0.025
Iron	2.1	N	0.10
Magnesium	35	N	5.0
Manganese	0.052	N	0.015
Nickel	0.040	UN	0.040
Potassium	7.6	N	5.0
Selenium	0.10	UN	0.10
Silver	0.010	UN	0.010
Sodium	49	N	5.0
Zinc	0.024	N	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

SAMPLE ID: LAB BLANK  
 SAMPLE DATE:  
 SAMPLE MATRIX: WATER

Test Name	Note Ref	Result	Reporting		Date Analyzed	Method Reference
			Limit	Units		
Alkalinity, Titrimetric		10U	10	MG/L as CaCO3	12/15/93	EPA310_1
TPH - IR		1.0U	1.0	MG/L	12/27/93	EPA418_1
Phenolics		0.010U	0.010	MG/L	01/06/94	EPA9066
Chloride by Ion Chrom.		1.0U	1.0	MG/L	01/05/94	EPA300_0
Chemical Oxygen Demand		25U	25	MG/L	12/28/93	EPA410_4
Chromium VI		0.010U	0.010	MG/L	12/10/93	EPA7196
Nitrate and Nitrite		0.050U	0.050	MG/L	12/14/93	EPA353_2
Silica		0.20U	0.20	MG/L	12/29/93	370_1
Sulfate by Ion Chrom.		1.0U	1.0	MG/L	01/05/94	EPA300_0
Total Dissolved Solids		10U	10	MG/L	12/14/93	EPA160_1
Total Kjeldahl Nitrogen		0.25U	0.25	MG/L	01/07/94	EPA351_3
Total Organic Carbon		1.0U	1.0	MG/L	12/21/93	EPA415_1
Total Suspended Solids		10U	10	MG/L	12/14/93	EPA160_2
Total Phosphorus		0.10U	0.10	MG/L	01/07/94	EPA365_3

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: Hazardous Substance Vols.  
 METHOD REFERENCE: EPA8240

SAMPLE ID: LAB BLANK  
 SAMPLE DATE:  
 SAMPLE MATRIX: WATER  
 ANALYSIS DATE: 12/16/93  
 DILUTION FACTOR: 1.0  
 UNITS: UG/L

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	100	U	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	96	88 - 110
BROMOFLUOROBENZENE	99	86 - 115
1,2-DICHLOROETHANE-D4	108	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **ABN HSL GC/MS Extractables**  
 METHOD REFERENCE: **EPA8270**

SAMPLE ID: **LAB BLANK**  
 SAMPLE DATE:  
 SAMPLE MATRIX: **WATER**  
 EXTRACTION DATE: **12/15/93**  
 ANALYSIS DATE: **12/20/93**  
 DILUTION FACTOR: **1.0**

	UNITS:	UG/L	Reporting				UG/L	Reporting		
			Result	Qual	Limit			Result	Qual	Limit
Phenol		10	U	10	2,6-Dinitrotoluene	10	U	10		
bis(2-Chloroethyl)ether		10	U	10	3-Nitroaniline	25	U	25		
2-Chlorophenol		10	U	10	Acenaphthene	10	U	10		
1,3-Dichlorobenzene		10	U	10	2,4-Dinitrophenol	25	U	25		
1,4-Dichlorobenzene		10	U	10	4-Nitrophenol	25	U	25		
Benzyl alcohol		10	U	10	Dibenzofuran	10	U	10		
1,2-Dichlorobenzene		10	U	10	2,4-Dinitrotoluene	10	U	10		
2-Methylphenol		10	U	10	Diethylphthalate	10	U	10		
bis(2-Chloroisopropyl)ether		10	U	10	4-Chlorophenyl-phenylether	10	U	10		
4-Methylphenol		10	U	10	Fluorene	10	U	10		
N-Nitroso-di-n-propylamine		10	U	10	4-Nitroaniline	10	U	10		
Hexachloroethane		10	U	10	4,6-Dinitro-2-methylphenol	25	U	25		
Nitrobenzene		10	U	10	N-Nitrosodiphenylamine (1)	10	U	10		
Isophorone		10	U	10	4-Bromophenyl-phenylether	10	U	10		
2-Nitrophenol		10	U	10	Hexachlorobenzene	10	U	10		
2,4-Dimethylphenol		10	U	10	Pentachlorophenol	25	U	25		
Benzoic Acid		10	U	10	Phenanthrene	10	U	10		
bis(2-Chloroethoxy)methane		10	U	10	Anthracene	10	U	10		
2,4-Dichlorophenol		10	U	10	Di-n-butylphthalate	10	U	10		
1,2,4-Trichlorobenzene		10	U	10	Fluoranthene	10	U	10		
Naphthalene		10	U	10	Pyrene	10	U	10		
4-Chloroaniline		10	U	10	Butylbenzylphthalate	10	U	10		
Hexachlorobutadiene		10	U	10	3,3'-Dichlorobenzidine	10	U	10		
4-Chloro-3-methylphenol		10	U	10	Benzo(a)anthracene	10	U	10		
2-Methylnaphthalene		10	U	10	Chrysene	10	U	10		
Hexachlorocyclopentadiene		10	U	10	bis(2-Ethylhexyl)phthalate	10	U	10		
2,4,6-Trichlorophenol		10	U	10	Di-n-octylphthalate	10	U	10		
2,4,5-Trichlorophenol		10	U	10	Benzo(b)fluoranthene	10	U	10		
2-Chloronaphthalene		10	U	10	Benzo(k)fluoranthene	10	U	10		
2-Nitroaniline		25	U	25	Benzo(a)pyrene	10	U	10		
Dimethylphthalate		10	U	10	Indeno(1,2,3-cd)pyrene	10	U	10		
Acenaphthylene		10	U	10	Dibenzo(a,h)anthracene	10	U	10		
					Benzo(g,h,i)perylene	10	U	10		

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **ABW HSL GC/MS Extractables**  
METHOD REFERENCE: **EPAS270**

SAMPLE ID: **LAB BLANK**  
SAMPLE DATE:  
SAMPLE MATRIX: **WATER**

Surrogates	% Recovery	Limits
Nitrobenzene-D5	88	35 - 114
2-Fluorobiphenyl	86	43 - 116
Terphenyl-D14	84	33 - 141
Phenol-D5	40	10 - 94
2-Fluorophenol	51	21 - 100
2,4,6-Tribromophenol	90	10 - 123

(1) N-Nitrosodiphenylamine cannot be separated from diphenylamine.

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME: **Metals**  
METHOD REFERENCE: **EPA6010**

SAMPLE ID: **LAB BLANK**  
SAMPLE DATE:  
SAMPLE MATRIX: **WATER**  
PREP DATE: 12/16/93  
ANALYSIS DATE: **01/05/94**  
DILUTION FACTOR: 1.0  
UNITS: **MG/L**

	Result	Qual	Reporting Limit
Aluminum	0.20	U	0.20
Barium	0.20	U	0.20
Cadmium	0.0050	U	0.0050
Calcium	5.0	U	5.0
Chromium	0.010	U	0.010
Copper	0.025	U	0.025
Iron	0.10	U	0.10
Magnesium	5.0	U	5.0
Manganese	0.015	U	0.015
Nickel	0.040	U	0.040
Potassium	5.0	U	5.0
Selenium	0.010	U	0.010
Silver	0.010	U	0.010
Sodium	5.0	U	5.0
Zinc	0.020	U	0.020

**Data qualifier key:**

- E - estimated value (see cover page)
- M - duplicate injection precision not met
- N - spike recovery not within control limits
- S - determined by MSA
- W - post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance
- \* - duplicate analysis outside control limits
- + - Correlation coefficient for the MSA <0.995
- B - < CRDL but >= IDL
- U - none detected
- 'blank' - positive result

Company: IT CORPORATION  
 Date: 01/10/94  
 Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
 AUSTIN, TX  
 (512) 892-6684  
 409832-003-01 Work Order: B3-12-154

TEST NAME: **Hazardous Substance Vols.**  
 METHOD REFERENCE: **EPA8240**

SAMPLE ID: **LAB BLANK #2**  
 SAMPLE DATE:  
 SAMPLE MATRIX: **WATER**  
 ANALYSIS DATE: **12/17/93**  
 DILUTION FACTOR: **1.0**  
 UNITS: **UG/L**

	Reporting				Reporting		
	Result	Qual	Limit		Result	Qual	Limit
Chloromethane	10	U	10	1,2-Dichloropropane	5	U	5
Bromomethane	10	U	10	trans-1,3-Dichloropropene	5	U	5
Vinyl chloride	10	U	10	Trichloroethene	5	U	5
Chloroethane	10	U	10	Chlorodibromomethane	5	U	5
Methylene chloride	10	U	10	1,1,2-Trichloroethane	5	U	5
Acetone	100	U	100	Benzene	5	U	5
Carbon disulfide	5	U	5	cis-1,3-Dichloropropene	5	U	5
1,1-Dichloroethene	5	U	5	2-Chloroethylvinyl ether	10	U	10
1,1-Dichloroethane	5	U	5	Bromoform	5	U	5
trans-1,2-Dichloroethene	5	U	5	2-Hexanone	50	U	50
cis-1,2-Dichloroethene	5	U	5	4-Methyl-2-pentanone	50	U	50
Chloroform	5	U	5	Tetrachloroethene	5	U	5
1,2-Dichloroethane	5	U	5	1,1,2,2-Tetrachloroethane	5	U	5
2-Butanone	3.1	J	100	Toluene	5	U	5
1,1,1-Trichloroethane	5	U	5	Chlorobenzene	5	U	5
Carbon tetrachloride	5	U	5	Ethylbenzene	5	U	5
Vinyl acetate	10	U	10	Styrene	5	U	5
Dichlorobromomethane	5	U	5	Xylenes, total	5	U	5

Surrogates	% Recovery	Limits
TOLUENE-D8	101	88 - 110
BROMOFLUOROBENZENE	101	86 - 115
1,2-DICHLOROETHANE-D4	103	76 - 114

**Data Qualifier Key:**

- U - none detected
- J - estimated value (less than the sample quantitation limit)
- B - analyte is found in the associated blank as well as in the sample
- 'blank' - positive result
- \* - Surrogate recovery is outside QC limit
- D - compound identified at a secondary dilution factor
- E - concentration exceeds calibration range

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME **Arsenic - Graphite Furnace** TEST CODE **AS\_GF**

Arsenic  
Graphite  
Furnace  
Method 7060, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. EPA 206.2-Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, December 1982.

TEST NAME **Chloride by Ion Chrom.** TEST CODE **CL\_IC**

Chloride  
USEPA 300.0 - The determination of inorganic anions in water by ion chromatography.

TEST NAME **Chemical Oxygen Demand** TEST CODE **COD**

COD  
EPA 410.4 - Chemical Analysis of Water and Wastewater. Colorimetric analysis for Chemical Oxygen Demand.

TEST NAME **Chromium VI** TEST CODE **CR\_VI**

Chromium VI  
Method 7196, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Colorimetric analysis. Equivalent to Standard Methods 3500-Cr D.

TEST NAME **Mercury** TEST CODE **HG\_AA**

Mercury  
Method 7471, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Cold vapor atomic absorption. Method 7470 is used for water.

Method 245.5-"Technical Additions to Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-055, December 1982.

TEST NAME **Metals** TEST CODE **ICPTK4**

Method not available.

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

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TEST NAME **Nitrate and Nitrite** TEST CODE **NO3NO2**  
  
Nitrate + Nitrite Method 353.2-Chemical Analysis of Water and Wastewater.  
Colorimetric Automated Cadmium Reduction method using  
Lachat autoanalyzer for NO3 and NO2 as N.

TEST NAME **Lead - Graphite Furnace** TEST CODE **PB\_GF**  
  
Lead EPA 7421, SW-846, Test Methods for Evaluating Solid  
Graphite Wastes, Third Edition.  
Furnace EPA 239.2-Technical Additions to Methods for Chemical  
Analysis of Water and Wastes," EPA-600/4-82-055,  
December 1982.

TEST NAME **Silica** TEST CODE **SI02**  
  
Silica Method 370.1-Chemical Analysis of Water and Wastewater.  
Colorimetric Analysis. This is equal to ASTM D859B.

TEST NAME **Sulfate by Ion Chrom.** TEST CODE **SO4\_IC**  
  
Sulfate USEPA Method 300.0 - The Determination of Inorganic  
Anions in Water by Ion Chromatography.

TEST NAME **Total Dissolved Solids** TEST CODE **TDS**  
  
Total Dissolved Method 160.1-Chemical Analysis of Water and Wastewater.  
Solids Gravimetric analysis.

TEST NAME **Total Kjeldahl Nitrogen** TEST CODE **TKN\_N**  
  
Kjeldahl Nitrogen Method 351.3-Chemical Analysis of Water and Wastewater.  
Digestion and colorimetric analysis.

TEST NAME **Total Organic Carbon** TEST CODE **TOC**

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

TEST NAME **Total Organic Carbon**

TEST CODE **TOC**

Total Organic Carbon

Method 415.1-Chemical Analysis of Water and Wastewater. Chemical oxidation and nondispersive infrared analysis. Equivalent to SW-846 Method 9060. Sample prep is instrument manufacturer specific.

TEST NAME **Total Suspended Solids**

TEST CODE **TSS**

Total Suspended Solids

Method 160.2-Chemical Analysis of Water and Wastewater. Filtration and gravimetric analysis of non-filterable residue.

TEST NAME **Total Phosphorus**

TEST CODE **T\_P**

Total Phosphorus

Method 365.3-Chemical Analysis of Water and Wastewater. Digestion and colorimetric analysis.

TEST NAME **ICPES Digestion - Water**

TEST CODE **Z3005**

Water Digestion

Method 3005A, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Digestion procedure for the preparation of surface and ground water samples for analysis by flame atomic absorption spectroscopy and inductively coupled plasma spectroscopy. The procedure determines total recoverable or dissolved metals.

TEST NAME **GFAA Digestion - Water**

TEST CODE **Z3020**

Water Digestion

Method 3020, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Acid digestion technique for Graphite Furnace.

Company: IT CORPORATION  
Date: 01/10/94  
Client Work ID: D.O. 5001

IT ANALYTICAL SERVICES  
AUSTIN, TX  
(512) 892-6684  
409832-003-01 Work Order: B3-12-154

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IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME **Alkalinity, Titrimetric** TEST CODE **310\_1**

Alkalinity EPA 310.1 - Chemical Analysis of Water and Wastewater. Titrimetric with sulfuric acid.

TEST NAME **TPH - IR** TEST CODE **418\_1**

418\_1 Method 418.1: Total Recoverable Petroleum Hydrocarbons, infrared spectrophotometric method. Methods for the chemical analysis of water and wastes. USEPA.

TEST NAME **ICP Metals** TEST CODE **6010**

Metals by ICP Inductively coupled emission spectroscopy according to Method 6010, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", SW-846, Third Edition.

TEST NAME **Hazardous Substance Vols.** TEST CODE **8240TK**

Hazardous Substance Method 8240, SW-846, Test Methods for Evaluating Solid List Volatiles Wastes, Third Edition. GC/MS Purge and Trap analysis.

TEST NAME **ABN HSL GC/MS Extractables** TEST CODE **8270TK**

Hazardous Substance Method 8270, SW-846, Test Methods for Evaluating Solid List Extractables Waste, Third Edition. Acid/Base-Neutral extraction followed by GC/MS analysis.

TEST NAME **Phenolics** TEST CODE **9066**

Phenolics SW-846 Method 9066. Total Recoverable Phenolics. Colorimetric, Automated 4-AAP with Distillation. Equivalent to EPA Method 420.2.

TEST NAME **Arsenic - Graphite Furnace** TEST CODE **AS\_GF**



**ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD \***

B31215-4  
Reference Document No. 314020  
Page 1 of 4

White: To accompany samples Yellow: Field copy \*See back of form for special instructions

Project Name/No. <sup>1</sup>Tinker 5001/409832 Samples Shipment Date <sup>7</sup> 12/09/93 Bill to: <sup>5</sup> 409832,03,01  
 Sample Team Members <sup>2</sup>M. Wilson / J. Sherswin/k. Kirschbaum Lab Destination <sup>8</sup> ITAS Austin D.O. 5001  
 Profit Center No. <sup>3</sup> 3527 Lab Contact <sup>9</sup> Karmen Deane  
 Project Manager <sup>4</sup> Jimmy Taylor Project Contact/Phone <sup>12</sup> (405) 736-2260  
 Purchase Order No. <sup>6</sup> 409832,03,01 Carrier/Waybill No. <sup>13</sup> 8460755785 Report to: <sup>10</sup> Tim Jennings  
 Required Report Date <sup>11</sup> Normal 810117111 IT Austin

**ONE CONTAINER PER LINE**

Sample Number	Sample 15 Description/Type	Date/Time Collected	Container Type	Sample Volume	Pre-19 preservative	Requested Testing Program	Condition on Receipt	Disposal Record No.
A1598	TRIP BLANK	12-02-93	clear glass	40ml	HCL	8240 VOC	Good, 10/21/93 R	03251020A
A1599	well sludge drying water Beds	12-09-93	clear glass	40ml (2)	HCL	8240 VOC		03251020A
		1500	amber glass	3.5L	ice	8270 SVOC		346032
				1L	H2SO4	418.1 TPH		
				500ml		9066 Phenols		
				250ml		410.4 COD		
						415.1 TOC		
						TKN 351.3		
						Nitrate/Nitrite 353.2		
			Plastic	500ml	HNO3	6010/7000 metals		

Special Instructions: <sup>23</sup>

Possible Hazard Identification: <sup>24</sup>

Non-hazard  Flammable  Skin Irritant  Poison B  Unknown

Sample Disposal: <sup>25</sup>

Return to Client  Disposal by Lab  Archive

Turnaround Time Required: <sup>26</sup>

Normal  Rush

QC Level: <sup>27</sup>

I.  II.  III.

1. Relinquished by <sup>28</sup> ITES Austin  
 (Signature/Affiliation) *Matthew A. Wilson* Date: 12/09/93  
 Time: 1820

1. Received by <sup>28</sup>  
 (Signature/Affiliation) *IT* Date: 12-10-93  
 Time: 0853

2. Relinquished by  
 (Signature/Affiliation)

2. Received by  
 (Signature/Affiliation)

3. Relinquished by  
 (Signature/Affiliation)

3. Received by  
 (Signature/Affiliation)

Comments: <sup>29</sup>



ENVIRONMENTAL  
TECHNOLOGY  
CORPORATION

**ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD (cont.)\***

Project Name Tinter 500

Project No. 409832

Samples Shipment Date 12/09/93

Reference Document No.<sup>30</sup> 314020  
Page 2 of 4

B312154

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
A1591	Well water/ Sludge Drying Beds	12-09-93 1500	Plastic	125ml	ice	Cr 6t 7196 Ground water parameters as per work plan	601, 418, 415, 12 12-10-93 DL	3291070A
A1592	Well water / Sludge Drying Beds	12-09-93 1530	Clear Glass Amber glass	1L (2) 40ml	ice HCl	8240 VOC 8270 SVOC		3237062
				2.5L	ice	418.1 TPH		
				500ml	H2SO4	9066 Phenols 410.4 COD 415.1 TOC TKN 351.3 Nitrate/Nitrite 353.2 6010/7000 Metals		
				250ml				
				↓				
			Plastic	500ml	HNO3	7196 Cr 6t Ground water parameters as per work plan		
				125ml	ice			
				1L (2) 40ml	ice	8240 VOC		3291070A
A1593	Well water/ Sludge Drying Beds	12-09-93 1550	Clear Glass Amber glass	2.5L	HCl	8270 SVOC		3237062
				1L	ice	418.1 TPH		
				500ml	H2SO4	9066 Phenols 410.4 COD 415.1 TOC TKN 351.3 Nitrate/Nitrite 353.2 6010/7000 Metals		
				250ml				
				↓				
			Plastic	500ml	HNO3	7196 Cr 6t Ground water parameters as per work plan		
				125ml	ice			
				1L	ice			
				↓				
				500ml	HNO3			
				125ml	ice			
				1L	ice			

White: To accompany samples

Yellow: Field copy

\*See back of form for special instructions



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**ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD (cont.)\***

Reference Document No. <sup>30</sup> 314020  
Page 3 of 4

Project Name Timber 5001

Project No. 409832

Samples Shipment Date 12/09/93

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time Collected	Container Type	Sample 18 Volume	Pre-19 servative	Requested Testing Program	Condition on Receipt	Disposal 22 Record No.
A1594 Dup	well Dup w/ water drying beds	12/09/93 1550	clear glass	40ml	HCl	8240 VOC	601.4 2.0 4.0 N/A	B3251020A
			Amber glass	2.5L	ice	8270 SVOC		3237062
				1L	H <sub>2</sub> SO <sub>4</sub>	418.1 TPH		
				500ml		9066 Phenols		
				250ml		410.4 cad		
						415.1 TOC		
						TKN 351.3		
						Nitrate/Nitrite 353.2		
			Plastic	500ml	HNO <sub>3</sub>	6010/7000 metals		
				125ml	ice	7196 Cr 6+		
				1L	ice	GROUND WATER POTENTIAL OR PER WORK PLAN		
A1595(MS/MSD)	well water drying beds	12/09/93 1630	clear glass	(2) 40ml	HCl	8240 VOC		B3251020A
			Amber glass	2.5L	ice	8270 SVOC		3237062
				1L	H <sub>2</sub> SO <sub>4</sub>	418.1 TPH		
				500ml		9066 Phenols		
				250ml		410.4 cad		
						415.1 TOC		
						TKN 351.3		
						Nitrate/Nitrite 353.2		
			Plastic	500ml	HNO <sub>3</sub>	6010/7000 metals		
				125ml	ice	7196 Cr 6+		
				1L	ice	GROUND WATER POTENTIAL OR PER WORK PLAN		

B312154

White: To accompany samples

Yellow: Field copy

\*See back of form for special instructions.



INTERNATIONAL  
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CORPORATION

**ANALYSIS REQUEST AND  
CHAIN OF CUSTODY RECORD (cont.)\***

B312154  
Reference Document No. 30 314020  
Page 4 of 4

Project Name: Tinker 5001

Project No. 409832

Samples Shipment Date 12/09/93

**ONE CONTAINER PER LINE**

Sample 14 Number	Sample 15 Description/Type	Date/Time Collected	Container Type	Sample 17 Volume	Pre-19 preservative	Requested Testing Program	Condition on 21 Receipt	Disposal 22 Record No.
A1596	well water/drying beds	12/09/93 1710	clear glass 400ml	40ml	HCl	8240 VOC	Good, 12-10-93	B3291020A
			Amber glass	2.5L	ice	8270 SVOC		B3291020A
				1L	H2SO4	418.1 TPH		
				500ml		9066 Phenols		
				250ml		4110.4 COD		
						415.1 TOC		
						TKN 351.3		
						Nitrate/Nitrite 353.2		
				500ml	HNO3	6010/7000 metals		
				125ml	ice	7196 Cr 6+		
				1L	ice	Groundwater parameters as per work plan		
A1597	well sludge water/drying beds	12/09/93 1730	clear glass	(2) 40ml	HCl	8240 VOC		B3291020A
			Amber glass	2.5L	ice	8270 SVOC		B3291020A
				1L	H2SO4	418.1 TPH		
				500ml		9066 Phenols		
				250ml		4110.4 COD		
						415.1 TOC		
						TKN 351.3		
						Nitrate/Nitrite 353.2		
				500ml	HNO3	6010/7000 metals		
				125ml	ice	7196 Cr 6+		
				1L		Groundwater parameters as per work plan		

White: To accompany samples Yellow: Field copy \*See back of form for special instructions

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1591

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
O2B						
	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
O2C						
	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	10.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	1.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
O2D						
	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1592

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
03B	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
03C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	5.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	10.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	5.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/21/93	12/21/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
03D	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1593

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
O4B						
	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
O4C						
	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/10/94	01/10/94	25.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	10.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
O4D						
	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

## Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1594

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
05B	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
05C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	10.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	10.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
05D	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1595

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
06C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	20.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	1.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	25.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/28/93	12/28/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
06D	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1595-MS

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
07C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	20.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	1.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	25.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/17/93	12/17/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
07D						
	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1595-MSD

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
08C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	20.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	1.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	25.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/17/93	12/17/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
08D						
	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1596

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
09B	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
09C	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	10.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	10.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
09D	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

## Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : A1597

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
10B						
	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
10C						
	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	10.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	10.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	10.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	10.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/20/93	12/20/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0
10D						
	AS_GF	B312154-11A	121530201	12/19/93	12/19/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0

Auxiliary Data Summary

01/11/94

Work order : B312154

Sample ID : LAB BLANK

FRAC	Tests	Blank Reference	Batch ID	Prep Date	Analysis Date	Dil. Factor
11A	310_1	B312154-11A	1215310_11	12/15/93	12/15/93	1.0
	418_1	B312154-11A	1218TPHIR1	12/18/93	12/27/93	1.0
	9066	B312154-11A	122190661	12/21/93	01/06/94	1.0
	AS_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	CL_IC	B312154-11A	0105CL_ICA	01/05/94	01/05/94	1.0
	COD	B312154-11A	1228COD2B	12/28/93	12/28/93	1.0
	CR_VI	B312154-11A	1210CR_VI2	12/10/93	12/10/93	1.0
	HG_AA	B312154-11A	1216HGAA2	12/16/93	12/16/93	1.0
	NO3NO2	B312154-11A	1214NO3NO2	12/14/93	12/14/93	1.0
	PB_GF	B312154-11A	121530201	12/15/93	12/19/93	1.0
	SIO2	B312154-11A	1229SIO21A	12/29/93	12/29/93	1.0
	SO4_IC	B312154-11A	105SO4_IC1	01/05/94	01/05/94	1.0
	TDS	B312154-11A	1214TDS1	12/14/93	12/14/93	1.0
	TKN_N	B312154-11A	0105TKN_N1	01/05/94	01/07/94	1.0
	TOC	B312154-11A	1220TOC3A	12/21/93	12/21/93	1.0
	TSS	B312154-11A	1214TSS1	12/14/93	12/14/93	1.0
	T_P	B312154-11A	0105T_P1	01/05/94	01/07/94	1.0

TINKER\_5001

WORK ORDER #

B312154

# OF WATER SAMPLES

11

# OF SOIL SAMPLES

8240

✓✓

8270

✓✓

IR

✓✓

AS

✓✓

CRIV

✓✓

HG

✓✓

ICP

W

PB

✓✓

SO4\_IC

✓✓

310\_1

✓✓

9066

✓✓

CL\_IC

✓✓

COD

✓✓

NO3NO2

✓✓

SI02

✓✓

TDS

✓✓

TKN\_N

✓✓

TOC

✓✓

TSS

✓✓

T\_P

✓✓

Fractions 2-6 + 9+10

## APPENDIX A

### DEFINITIONS

- ND(U) - Analyte was analyzed for, but not detected. The value given after the ND or "U" is the detection limit for that compound.
- A - The compound denoted with an "A" indicates a suspected aldol condensation product.
- B - Indicates the compound was also detected in the blank, but at levels less than 5X the detection limit. Values for this compound may be suspect.
- J - Indicates the compound was detected in the sample, but at levels less than the detection limit, but above the MDL. Results should be regarded as estimated.
- D - Indicates that the compound was identified in an analysis at a secondary dilution factor.
- N - Indicates presumptive evidence of a compound. This flag is used for tentatively identified compounds.

MS - Matrix Spike	UG/L - Micrograms/Liter
MSD - Matrix Spike Duplicate	UG/KG - Micrograms/Kilogram
RPD - Relative Percent Difference	MG/KG - Milligrams/Kilogram
DL - Detection limit	MG/L - Milligrams/Liter
	%REC - Percent Recovery

### QC Acceptance Limits

<u>Method 8240</u>	<u>Water</u>	<u>Soil</u>
<b>Surrogate &amp; Recoveries</b>		
BFB	86-115	74-121
Dichloroethane	76-114	70-120
Toluene-d8	88-110	81-117
<b>Matrix Spike Limits(%)</b>		
1,1-Dichloroethene	61-145	59-172
Trichloroethene	71-120	62-137
Benzene	76-127	66-142
Toluene	76-125	59-139
Chlorobenzene	75-130	60-133

<u>Method 8270</u>	<u>Water</u>	<u>Soil</u>
<b>Surrogate &amp; Recoveries</b>		
Nitrobenzene-d5	35 - 114	23 - 120
2-Fluorobiphenyl	43 - 116	30 - 115
Terphenyl-d14	33 - 141	18 - 137
Phenol-d5	10 - 94	24 - 113
2-Fluorophenol	21 - 100	25 - 121
2,4,6-Tribromophenol	10 - 123	19 - 122
<b>Matrix Spike Limits(%)</b>		
Phenol	14 - 99	15 - 101
Chlorophenol	19 - 107	20 - 113
1,4-Dichlorobenzene	18 - 101	17 - 102
N-Nitroso-di-propylamine	32 - 108	30 - 113
1,2,4-Trichlorobenzene	24 - 109	21 - 117
4-Chloro-3-methylphenol	31 - 111	34 - 108
Acenaphthene	33 - 110	30 - 110
4-Nitrophenol	1 - 141	d - 138
2,4-Dinitrotoluene	35 - 106	31 - 110
Pentachlorophenol	1 - 147	2 - 145
Pyrene	42 - 119	36 - 126

## METALS CONTROL LIMITS

**ICP:**  $\pm 20\%$  for MS/MSD & Duplicate

**GF:** Control Charts for MS/MSD;  $\pm 20\%$  for Dup

### ICV/CCV

GF ICV  $\pm 20\%$

GF CCV  $\pm 20\%$

ICP ICV/CCV  $\pm 10\%$

HG AA  $\pm 20\%$

**CONTROL LIMITS  
GRAPHITE FURNACE/MERCURY**

<u>ANALYTE</u>	<u>MATRIX</u>	<u>LIMITS</u>	<u>COMMENTS</u>
Hg	water	21 - 170	Control Charts (B inst.)
Hg	soil	44 - 150	Control Charts (B)
As	water	59 - 150	D
As	soil	75 - 125	D
As	water	52 - 140	C
As	soil	35 - 142	C
Pb	water	48 - 153	D
Pb	soil	75 - 125	D
Pb	water	33 - 163	C
Pb	soil	75 - 125	C
Se	water	37 - 136	D
Se	soil	27 - 118	D
Se	water	20 - 147	C
Se	soil	2.6 - 139	C

B3121521

Test Code/Date: 8270 / 1275  
Set #: \_\_\_\_\_ Inst. ID: \_\_\_\_\_

Type	Lab Sample ID	Lab File ID	Performed (Y or N)
Blank	B312154-BL14		
Sample			
MS	B312154-7B	MS016	
KSD	-8B	MSD06	
LCS	LCS		

This QA Spike Lot applies to the following Samples:

#	Client Sample ID	Lab Sample ID	Lab File ID
1		B312154-2B	R/15542
2		-3B	
3		-4B	
4		-5B	
5		-6B	
6		-9B	
7		-10B	↓ ↓
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Comments: \_\_\_\_\_

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY AND BLANK SPIKE RECOVERY

Lab Name: ITAS - Austin CLIENT ID: QC BATCH ID  
 Sample Names: DM547 DD548 Prep Code/Date: 3520 | 12/15/93  
 Date Ran: 12/21/93 12/21/93 Test Code/Date: 8270 | 12/15/93  
 Time Ran: 2.08 2.36 Set #: 1 Inst.ID:0  
 Matrix Spike - SAM Sample No. B312154/06 Matrix: WATER  
 ( 1000 ML TO 1 ML ) 1.0 X DIL

103  
12/28/97

COMPOUND NAME	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	MS CONC (ug/L)	MS % REC #	QC LIMITS REC.
PHENOL	100.00	.00	81.27	81	14 - 99
2-CHLOROPHENOL	100.00	.00	86.75	87	19 - 107
1,4-DICHLOROBENZENE	50.00	.00	39.00	78	18 - 101
N-NITROSODI-N-PROPYLAMINE	50.00	.00	35.89	72	32 - 108
1,2,4-TRICHLOROBENZENE	50.00	.00	42.06	84	24 - 109
4-CHLORO-3-METHYLPHENOL	100.00	.00	91.07	91	31 - 111
ACENAPHTHENE	50.00	.00	45.94	92	33 - 110
4-NITROPHENOL	100.00	.00	77.65	78	1 - 141
2,4-DINITROTOLUENE	50.00	.00	38.54	77	35 - 106
PENTACHLOROPHENOL	100.00	.00	110.10	110	1 - 147
PYRENE	50.00	.00	49.73	99	42 - 119

BLANK CONC (ug/L)	BS CONC (ug/L)	BS % REC #	QC LIMITS REC.
0	.00	0	14 - 99
0	.00	0 *	19 - 107
0	.00	0 *	18 - 101
0	.00	0 *	32 - 108
0	.00	0 *	24 - 109
0	.00	0 *	31 - 111
0	.00	0 *	33 - 110
0	.00	0 *	1 - 141
0	.00	0 *	35 - 106
0	.00	0 *	1 - 147
0	.00	0 *	42 - 119

COMPOUND NAME	SPIKE ADDED (ug/L)	MSD CONC. (ug/L)	MSD % REC #	% RPD #	QC RPD	LIMITS REC.
PHENOL	100.00	81.13	81	0	41	14 - 99
2-CHLOROPHENOL	100.00	87.68	88	1	45	19 - 107
1,4-DICHLOROBENZENE	50.00	39.21	78	1	46	18 - 101
N-NITROSODI-N-PROPYLAMINE	50.00	37.06	74	3	46	32 - 108
1,2,4-TRICHLOROBENZENE	50.00	44.46	89	6	55	24 - 109
4-CHLORO-3-METHYLPHENOL	100.00	95.31	95	5	37	31 - 111
ACENAPHTHENE	50.00	47.93	96	4	45	33 - 110
4-NITROPHENOL	100.00	81.91	82	5	71	1 - 141
2,4-DINITROTOLUENE	50.00	42.00	84	9	43	35 - 106
PENTACHLOROPHENOL	100.00	109.45	109	1	143	1 - 147
PYRENE	50.00	51.00	102	3	18	42 - 119

CLP LIMITS SPIKE	%RPD
12 - 110	42
27 - 123	40
36 - 97	28
41 - 116	38
39 - 98	28
23 - 97	42
46 - 118	31
10 - 80	50
24 - 96	38
9 - 103	50
26 - 127	51

‡ Column to be used to flag recovery and RPD values with an asterisk.

\* Values outside of QC limits.

RPD: 0 out of 11 outside limits.

Spike Recovery: 0 out of 22 outside limits.

SURROGATE RECOVERIES DN547 DD548 D0902 LIMITS

D5-NITROBENZENE	88	91	0 *	103	35 - 114
2-FLUOROBIPHENYL	83	86	0 *	107	43 - 116
D14-P-TERPHENYL	87	88	0 *	104	33 - 141
15-PHENOL	79	82	0 *	108	10 - 94
2-FLUOROPHENOL	78	78	0 *	90	21 - 100
2,4,6-TRIBROMOPHENOL	94	97	0 *	131	10 - 123

WATER SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: ITAS - Austin CLIENT ID: QC BATCH ID  
 Sample Names: DBP54 DBK54 Prep Code/Date: 3520 | 12/15/93  
 Date Ran: 12/20/93 12/20/93 Test Code/Date: 8270 | 12/15/93  
 Time Ran: 23.16 22.47 Set #:1 Inst.ID: 0  
 Matrix Spike - SAM Sample No. B312154/BS Matrix: WATER  
 ( 1000.00 ML TO 1.00 ML) 1.0 X DIL

COMPOUND NAME	SPIKE ADDED (ug/L)	BLANK CONC (ug/L)	BS CONC (ug/L)	BS % REC #	QC LIMITS REC.
PHENOL	100.00	.00	73.42	73	14 - 99
2-CHLOROPHENOL	100.00	.00	86.09	86	19 - 107
1,4-DICHLOROBENZENE	50.00	.00	37.89	76	18 - 101
N-NITROSODI-N-PROPYLAMIN	50.00	.00	36.42	73	32 - 108
1,2,4-TRICHLOROBENZENE	50.00	.00	42.65	85	24 - 109
4-CHLORO-3-METHYLPHENOL	100.00	.00	86.16	86	31 - 111
ACENAPHTHENE	50.00	.00	45.95	92	33 - 110
4-NITROPHENOL	100.00	.00	75.45	75	1 - 141
2,4-DINITROTOLUENE	50.00	.00	40.24	80	35 - 106
PENTACHLOROPHENOL	100.00	.00	95.48	95	1 - 147
PYRENE	50.00	.00	46.22	92	42 - 119

CLP LIMIT SPIKE	*RPD
12 - 110	42
27 - 123	40
36 - 97	28
41 - 116	38
39 - 98	28
23 - 97	42
46 - 118	31
10 - 80	50
24 - 96	38
9 - 103	50
26 - 127	51

*DB*  
12/28/93

# Column to be used to flag recovery and RPD values with an asterisk.

\* Values outside of QC limits.

Spike Recovery: 0 out of 11 outside limits.

SURROGATE RECOVERIES DBP54 DBK54 LIMITS

05-NITROBENZENE	86	88	35 - 114
2-FLUOROBIPHENYL	86	86	43 - 116
014-P-TERPHENYL	86	84	33 - 141
05-PHENOL	78	40	10 - 94
2-FLUOROPHENOL	74	51	21 - 100
2,4,6-TRIBROMOPHENOL	88	90	10 - 123



ITAS\_Austin Volatiles QA Spike Lot Summary LOT#: \_\_\_\_\_

Date/Time: 12/16/93

Instrument: GC/MS A1

Operator: MBP

Test/Matrix: 8240 / Water

GC Column: RTX 502.2

Operator: MBP

Type	Lab Sample ID	Lab File ID	Performed (Y or N)
Sample	B312154-02	7AT542	Y
MS	-02 MS	7AM542	↓
MSD	-02 MSD	7AD542	↓
LCS	-BS	7AB516	

This QA Spike Lot applies to the following Samples:

#	Client * Sample ID	Lab Sample ID	Lab File ID
01	Jinku	B312154-01	.
02		-02	
03		-03	
04		-04	
05		-05	
06		-06	
07		-09	
08		-10	
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Comments: \_\_\_\_\_

\* - Field used only if necessary.

QC Batch ID \_\_\_\_\_  
 Prep Code/Date: \_\_\_\_\_ / \_\_\_\_\_  
 Test Code/Date: 8240 / 12/16/93  
 Set #: \_\_\_\_\_ | Inst. ID: A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY AND BLANK SPIKE RECOVERY

Lab Name: ITAS - Austin Date Ran: 12/16/93 QC BATCH ID  
 Sample Names: >AMS42 >ADS42 >ABS16 Prep Code/Date: |  
 CLIENT ID: Test Code/Date: 8240 | 12/16/93  
 Matrix Spike - SAM Sample No. B312154/02 Matrix: WATER Set #: Inst.ID: A1  
 ( 5.000 ML TO 5 ML) 1.0 X DIL

COMPOUND NAME	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	MS CONC (ug/L)	MS REC %	QC LIMITS REC.
1,1-Dichloroethene	50.00	.00	45.46	91	61 - 145
Trichloroethene	50.00	.00	44.82	90	71 - 120
Benzene	50.00	.00	46.08	92	76 - 127
Toluene	50.00	.00	49.16	98	76 - 125
Chlorobenzene	50.00	.00	50.20	100	75 - 130

BLANK CONC (ug/L)	BS CONC (ug/L)	BS REC %	QC LIMITS REC.
0	52.27	105	61 - 145
0	41.83	84	71 - 120
0	49.09	98	76 - 127
0	48.15	96	76 - 125
0	48.36	96	75 - 130

COMPOUND NAME	SPIKE ADDED (ug/L)	MSD CONC. (ug/L)	MSD % REC	RPD %	QC LIMITS REC.
1,1-Dichloroethene	50.00	43.68	87	4	61 - 145
Trichloroethene	50.00	42.98	86	4	71 - 120
Benzene	50.00	44.82	90	3	76 - 127
Toluene	50.00	47.72	95	3	76 - 125
Chlorobenzene	50.00	49.51	99	1	75 - 130

\* Column to be used to flag recovery and RPD values with an asterisk.

\* Values outside of QC limits.

RPD: 0 out of 5 outside limits.

Spike Recovery: 0 out of 10 outside limits  
 (12/17) (12/17) (12/16)  
 19:17 18:43 22:35

SURROGATE RECOVERIES >AMS42 >ADS42 >ABS16 LIMITS

Toluene - d8	107	107	98	88 - 110
Bromofluorobenzene	99	99	99	86 - 115
1,2-Dichloroethane - d4	99	96	103	76 - 114

(12/16)  
 21:41  
 >ALC16 => all neg

96  
 99  
 108

QC BATCH ID FOR ICPEs	
PREPREP METHOD:	NA
PREP METHOD:	Z3005
ANALYSIS METHOD:	6010
BATCH DATE:	12-16-93
INSTRUMENT ID:	B-
SET (BATCH) #:	2

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1) B312154-020
- 2) | -030
- 3) | -040
- 4) | -050
- 5) | -060
- 6) | -090
- 7) ↓ -100
- 8) \_\_\_\_\_
- 9) \_\_\_\_\_
- 10) \_\_\_\_\_
- 11) \_\_\_\_\_
- 12) \_\_\_\_\_
- 13) \_\_\_\_\_
- 14) \_\_\_\_\_
- 15) \_\_\_\_\_
- 16) \_\_\_\_\_
- 17) \_\_\_\_\_
- 18) \_\_\_\_\_
- 19) \_\_\_\_\_
- 20) \_\_\_\_\_

Batch QC Samples

- LCS ID: LCS05121693-1
- LCSD ID: LCS005121693-1
- MB ID: PBN05121693-1
- MS ID: B312154-070 MS
- MSD ID: B312154-080MSD
- REP ID: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

LCFICK 4

ANALYTES REQUIRED FOR BATCH:

Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
<del>X</del>	<del>X</del>	—	—	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	—	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	—	<del>X</del>
Ni	Pb	Sb	Se	Si	Sn	Ti	Tl	V	Zn							
<del>X</del>	—	—	<del>X</del>	—	—	—	—	—	<del>X</del>							

QC Batch ID	
Prep Method:	3005
Analysis Method:	6010
Batch Date:	12/16/93
Instrument ID:	B
Batch (Set) #:	2

Batch QC Information	
Matrix:	WATER
Units:	MG/L
Data Reported to PQL	
Method Blk ID:	PB05121693-1
LCS ID:	LCS05121693-1
LCSD ID:	LCSD05121693-1
MS Sample ID:	B312154-07D
MSD Sample ID:	B312154-08D
Rep Sample ID:	0

Analyte	Replicate Sample Data				Blank / LCS Batch QC									
	Original Result for Replicate	Replicate Result	% RPD	Q	Method Blank Result	LCS true Value (mg/L)	LCS Conc. Found	LCS % Rec.	Q	LCSD Conc. Found	LCSD % Rec.	Q	% RPD for LCS/LCSD Recoveries	Q
Ag	ND				< 0.010	1	0.9617	96		0.97	97		0.95	
Al	ND				< 0.20	10	10.2	102		10.22	102		0.20	
As					< 0.10	1	1.046	105		1.06	106		1.61	
B					< 0.20	1	0.9738	97		0.99	99		1.77	
Ba	1.385				< 0.20	1	0.9872	99		0.99	99		0.14	
Be	ND				< 0.0050	1	0.9767	98		0.99	99		0.89	
Ca	65.72				< 5.0	20	20.79	104		21.00	105		1.01	
Cd	ND				< 0.0050	1	0.9664	97		0.98	98		1.13	
Co					< 0.050	1	0.9388	94		0.95	95		1.25	
Cr	ND				< 0.010	1	0.9905	99		1.00	100		0.52	
Cu	ND				< 0.025	1	0.9395	94		0.94	94		0.37	
Fe	0.6202				< 0.10	10	10.62	106		10.51	105		1.04	
K	ND				< 5.0	20	19.47	97		20.03	100		2.84	
Mg	35.58				< 5.0	20	20.23	101		20.32	102		0.44	
Mn	0.6339				< 0.015	1	0.9468	95		0.95	95		0.60	
Mo					< 0.10	1	0.9549	95		0.97	97		1.20	
Na	47.72				< 5.0	20	20.14	101		20.15	101		0.05	
Ni	ND				< 0.040	1	0.946	95		0.95	95		0.87	
Pb					< 0.050	1	0.9492	95		0.96	96		0.90	
Sb					< 0.060	1	1.015	101		1.00	100		1.39	
Se	ND				< 0.10	1	1.001	100		1.03	103		2.86	
Si					< 1.0	10	11.26	113		11.12	111		1.25	
Sn					< 0.10	1	0.9343	93		1.00	100		7.09	
Ti					< 0.10	1	0.9903	99		0.99	99		0.33	
Tl					< 0.20	1	1.055	106		1.03	103		2.20	
V					< 0.050	1	0.9608	96		0.97	97		0.76	
Zn	ND				< 0.020	1	0.9605	96		0.96	96		0.12	

QC Data Reviewed By: LG Date/Time: 1/05/94 16:00-

Comments:

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Qualifiers: N - LCS % Recovery was outside method limits of 80-120 %.  
 R - % RPD for LCS/LCSD was outside control limit of 20 %.  
 \* Replicate RPD was outside method control limit of 20 %

QC Batch ID	
Prep Method:	
Prep Method:	3005
Analysis Method:	6010
Batch Date:	12/16/93
Instrument ID:	B
Batch (Set) #:	2

Batch QC Information		
Matrix:	WATER	Data Reported to PQL
Units:	MG/L	
		Corr. Factor
Method Blk ID:	PB05121693-1	1
LCS ID:	LCS05121693-1	1
LCSD ID:	LCSD05121693-1	1
MS Sample ID:	B312154-07D	1
MSD Sample ID:	B312154-08D	1
Rep Sample ID:		

Spike Sample Data

Analyte	Original Result for MS/MSD	MS Result	MS Spike Added	MS % Rec.	Q	MSD Result	MSD Spike Added	MSD % Rec.	Q	% RPD for MS/MSD Recoveries	Q	% RPD for MS/MSD Result As Replicates	Q
Ag	ND	0.7103	1.00	71	N	0.7723	1.00	77	N	8.36			
Al	ND	7.854	10.00	79	N	8.675	10.00	87		9.93			
As													
B													
Ba	1.385	2.25	1.00	87		2.502	1.00	112		25.43	R		
Be	ND	0.7321	1.00	73	N	0.7927	1.00	79	N	7.95			
Ca	65.72	76.15	20.00	52	N	85	20.00	96		59.58	R		
Cd	ND	0.7028	1.00	70	N	0.7587	1.00	76	N	7.65			
Co													
Cr	ND	0.7159	1.00	72	N	0.7764	1.00	78	N	8.11			
Cu	ND	0.6915	1.00	69	N	0.7578	1.00	76	N	9.15			
Fe	0.6202	8.084	10.00	75	N	8.852	10.00	82		9.79			
K	ND	15.35	20.00	77	N	17.01	20.00	85		10.26			
Mg	35.58	48.55	20.00	65	N	54.05	20.00	92		34.99	R		
Mn	0.6339	1.277	1.00	64	N	1.408	1.00	77	N	18.49			
Mo													
Na	47.72	60.4	20.00	63	N	67.15	20.00	97		42.04	R		
Ni	ND	0.6841	1.00	68	N	0.736	1.00	74	N	7.31			
Pb													
Sb													
Se	ND	0.7239	1.00	72	N	0.7355	1.00	74	N	1.59			
Si													
Sn													
Ti													
Tl													
V													
Zn	ND	0.7035	1.00	70	N	0.7639	1.00	76	N	8.23			

Comments: *ncm filed for all N's*

- Qualifiers (Q):
- H - Sample concentration was greater than five times the spike level.
  - N - Spike recovery was outside method control limits of 80-120 %.
  - R - Percent RPD for MS/MSD recoveries was outside method control limit of 20 %.
  - D - Sample concentration was greater than five times the spike level.
- The RPD was calculated between the MS and MSD results as replicates.

12/27

0012154

ITAS - AUSTIN EXTRACTABLES QA LOT SUMMARY:

QC Batch ID

Prep Code/Date: T-w-4<sup>P</sup> 12/16/93  
Test Code/Date: \_\_\_\_\_/\_\_\_\_\_  
Set #: \_\_\_\_\_ Inst. ID: \_\_\_\_\_

Type	Lab Sample ID	Result	Percent Recovery
Blank	B312154-01	ND	<
Blank spike	B5	5.7	100
MS	07B	11	95
MSD	08A	12	100

QC limits  
< Reporting limit  
70 to 130%  
70 to 130%  
70 to 130%

This QA Spike Lot applies to the following Samples:

#	Client	Sam # + Fraction	Date of Prep
1	T. Nce	B312154-06B	12/16/93
2		B312154-02B	12/18/93
3		03B	↓
4		04B	
5		05B	
6		09B	
7		10B	
8		B312169-02B	
9		03B	
10		04B	
11		05B	
12		06B	
13			
14			
15			
16			
17			
18			
19			
20			

Comments: \_\_\_\_\_  
\_\_\_\_\_

QC BATCH ID FOR WET CHEM - Test Code: <u>NO<sub>3</sub> NO<sub>2</sub></u>
PREPREP METHOD: <u>—</u>
PREP METHOD: <u>—</u>
ANALYSIS METHOD: <u>353.2</u>
BATCH DATE: <u>12-14-93</u>
INSTRUMENT ID: <u>A</u>
SET (BATCH) #: <u>1</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

- 1 B312154-02C
- 2 -03C
- 3 -04C
- 4 -05C
- 5 -06C
- 6 -09C
- 7 -10C
- 8 B312143-01C
- 9 -02C
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

- LCS ID: LC5121493-1
- LCSD ID: LC50121493-1
- MB ID: MB121493-1
- MS ID: B312154-07C MS of 06C
- MSD ID: 6-08C MSD of 06C
- REP ID: B312154-10C DUP

Batch QC Results

MDL: — PQL: 0.050

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	<0.050	mg/L	DSB	12/14/93 16:29
LCS % Rec	105	% Rec		
LCSD % Rec	101	% Rec		
LCS/LCSD RPD	3.88	% RPD		
MS % Rec	101	% Rec		
MSD % Rec	96.4	% Rec		
MS/MSD RPD	4.66	% RPD		
REP RPD	1.68	% RPD		

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: CR-VI

PREPREP METHOD:

PREP METHOD:

ANALYSIS METHOD: CR-VI

BATCH DATE: 12/10/93

INSTRUMENT ID: A

SET (BATCH) #: 2

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

- 1: B312154-02C
- 2: 03C
- 3: 04C
- 4: 05C
- 5: 06C
- 6: 09C
- 7: 10C
- 8: [Handwritten mark]
- 9: [Handwritten mark]
- 10: [Handwritten mark]
- 11: [Handwritten mark]
- 12: [Handwritten mark]
- 13: [Handwritten mark]
- 14: [Handwritten mark]
- 15: [Handwritten mark]
- 16: [Handwritten mark]
- 17: [Handwritten mark]
- 18: [Handwritten mark]
- 19: [Handwritten mark]
- 20: [Handwritten mark]

- LCS ID: LCS 121093-2
- LCSD ID: LCSD 850 121093-2
- MB ID: WB B312154
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312154-10C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 0.010

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	6	mg/L	SAT	12/10/93 12:00
LCS % Rec	102	% Rec		
LCSD % Rec	94.0	% Rec		
LCS/LCSD RPD	8.16	% RPD		
MS % Rec	92.0	% Rec		
MSD % Rec	94.0	% Rec		
MS/MSD RPD	2.14	% RPD		
REP RPD	6	% RPD		

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>SO4-1C</u>	
PREPREP METHOD:	
PREP METHOD:	
ANALYSIS METHOD: <u>SO4-1C</u>	
BATCH DATE: <u>1/5/97</u>	
INSTRUMENT ID: <u>A</u>	
SET (BATCH) #: <u>1A</u>	

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1 B312154-02C
- 2 -03C
- 3 -04C
- 4 -05C
- 5 -06C
- 6 -09C
- 7 -10C
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Batch QC ID's

- LCS ID: 010594-1
- LCSD ID: 010594-2
- MB ID: 010594-1
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312169-04C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 10 mg/L

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0.0	mg/L	BBB	1/5/97 7:39
LCS % Rec	107	% Rec		
LCSD % Rec	104	% Rec		
LCS/LCSD RPD	2.84	% RPD		
MS % Rec	87.0	% Rec		
MSD % Rec	84.5	% Rec		
MS/MSD RPD	2.92	% RPD		
REP RPD	12.1	% RPD		

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>Ce-1C</u>	
PREPREP METHOD:	
PREP METHOD:	
ANALYSIS METHOD: <u>Ce-1C</u>	
BATCH DATE: <u>11/5/94</u>	
INSTRUMENT ID: <u>A</u>	
SET (BATCH) #: <u>1A</u>	

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1 B312154-02C
- 2 -03C
- 3 -04C
- 4 -05C
- 5 -06C
- 6 -09C
- 7 -10C
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Batch QC ID's

- LCS ID: 010594-1
- LCSD ID: 010594-2
- MB ID: 010594-1
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312154-04C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 1.0 mg/L

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0.0	mg/L	RRS	01/05/94 7:39
LCS % Rec	109	% Rec		
LCSD % Rec	104	% Rec		
LCS/LCSD RPD	4.69	% RPD		
MS % Rec	108	% Rec		
MSD % Rec	115	% Rec		
MS/MSD RPD	6.28	% RPD		
REP RPD	5.64	% RPD	✓	✓

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>T-P</u>	
PREPREP METHOD:	<u>—</u>
PREP METHOD:	<u>—</u>
ANALYSIS METHOD:	<u>365.4 TKP</u>
BATCH DATE:	<u>1-<del>5</del><sup>5</sup>-94</u> <small>020 11/194</small>
INSTRUMENT ID:	<u>A</u>
SET (BATCH) #:	<u>1</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

1	B312154-02c
2	-03c
3	-04c
4	-05c
5	-06c
6	-09c
7	↓ -10c
8	B312151-02c
9	-03c
10	↓ -04c
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

Batch QC ID's

LCS ID:	<u>LC3010594-1</u>
LCSD ID:	<u>NA</u>
MB ID:	<u>PBW010594-1</u>
MS ID:	<u>B312154-07c</u> <small>ms 000c</small>
MSD ID:	<u>-07c</u> <small>msd 000c</small>
REP ID:	<u>ICV/ICUCUF</u>

Batch QC Results

MDL: — PQL: 0.10

Sample ID	Result	Units	Analyst	Date/Time		
Method Blk	<0.10	MS/L	053	1/7/94 14:15		
LCS % Rec	104	% Rec				
LCSD % Rec	NA	% Rec				
LCS/LCSD RPD	NA	% RPD				
MS % Rec	100	% Rec				
MSD % Rec	98	% Rec				
MS/MSD RPD	2.0	% RPD				
REP RPD	3.7	% RPD			✓	✓

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>TKN</u>	
PREPREP METHOD:	—
PREP METHOD:	—
ANALYSIS METHOD:	<u>351.2</u>
BATCH DATE:	<u>1-5-94</u>
INSTRUMENT ID:	<u>A</u>
SET (BATCH) #:	<u>1</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1 3312154-02C
- 2 -03C
- 3 -04C
- 4 -05C
- 5 -06C
- 6 -07C
- 7 -10C
- 8 3312143-01C
- 9 -02C
- 10 B312151-02C
- 11 -03C
- 12 -04C
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Batch QC ID's

- LCS ID: LCS010594-1
- LCSD ID: MA
- MB ID: PBW 010594-1
- MS ID: 3312154-07C ms #06
- MSD ID: -08C msd #06
- REP ID: ICIUCU DVP

Batch QC Results

MDL: \_\_\_\_\_ PQL: \_\_\_\_\_

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	<0.25	mg/L	DSB	1/7/94 12:00
LCS % Rec	99	% Rec		
LCSD % Rec	—	% Rec		
LCS/LCSD RPD	—	% RPD		
MS % Rec	93.8	% Rec		
MSD % Rec	94.6	% Rec		
MS/MSD RPD	0.85	% RPD		
REP RPD	0.92	% RPD		

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>ALK-T</u>	
PREPREP METHOD:	<u>NA</u>
PREP METHOD:	<u>NA</u>
ANALYSIS METHOD:	<u>ALK-TD</u>
BATCH DATE:	<u>12-15-93</u>
INSTRUMENT ID:	<u>A</u>
SET (BATCH) #:	<u>1</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

1 B312169 02C → 06C LCS ID: 121593-1  
 2 B312151 02C → 09C LCSD ID: 121593-2  
 3 B312145 MB ID: NA  
 4 B312147 01A MS ID: NA  
 5 B312154 02C → 10C MSD ID: NA  
 6 B312147-07C, 20A REP ID: B312169, B312151, B312154, B312147 gm

Batch QC Results

MDL: \_\_\_\_\_ PQL: 10

7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

Sample ID	Result	Units	Analyst	Date/Time
Method Bk	<u>0</u>		<u>JAM</u>	<u>12-15-93</u>
LCS % Rec	<u>100</u>	% Rec		
LCSD % Rec	<u>100</u>	% Rec		
LCS/LCSD RPD	<u>NA</u>	% RPD		
MS % Rec	<u>↓</u>	% Rec		
MSD % Rec	<u>↓</u>	% Rec		
MS/MSD RPD	<u>↓</u>	% RPD		
REP RPD	<u>1.24</u>	% RPD	<u>Q</u>	

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>SiO<sub>2</sub></u>	
PREPREP METHOD:	
PREP METHOD:	
ANALYSIS METHOD:	<u>STD<sub>2</sub></u>
BATCH DATE:	<u>12/29/93</u>
INSTRUMENT ID:	<u>A</u>
SET (BATCH) #:	<u>1A</u>

**Work Orders/Fractions Associated With Batch**

**Lab Sample ID's**

- 1 B312154-02C
- 2 -03C
- 3 -04C
- 4 -05C
- 5 -06C
- 6 -09C
- 7 -10C
- 8 \_\_\_\_\_
- 9 \_\_\_\_\_
- 10 \_\_\_\_\_
- 11 \_\_\_\_\_
- 12 \_\_\_\_\_
- 13 \_\_\_\_\_
- 14 \_\_\_\_\_
- 15 SAT
- 16 12/29
- 17 \_\_\_\_\_
- 18 \_\_\_\_\_
- 19 \_\_\_\_\_
- 20 \_\_\_\_\_

**Batch QC ID's**

- LCS ID: LCS122993-1
- LCSD ID: LCSD122993-1
- MB ID: MB122993-1
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312154-10C

**Batch QC Results**

MDL: \_\_\_\_\_

PQL: 0.20<sup>mg/L</sup>

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0	mg/L	SAT	12/29/93
LCS % Rec	90.0	% Rec		
LCSD % Rec	96.0	% Rec		
LCS/LCSD RPD	6.45	% RPD		
MS % Rec	101	% Rec		
MSD % Rec	103	% Rec		
MS/MSD RPD	1.96	% RPD		
REP RPD	1.28	% RPD		

**Comments:**

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QC BATCH ID FOR WET CHEM - Test Code: TOC

PREPREP METHOD: \_\_\_\_\_

PREP METHOD: \_\_\_\_\_

ANALYSIS METHOD: TOC

BATCH DATE: 12/20/93

INSTRUMENT ID: A

SET (BATCH) #: 3A

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

1 B312154-02C  
2 03C  
3 04C  
4 05C  
5 06C  
6 09C  
7 10C  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

LCS ID: LCS122093-3  
LCSD ID: LCSD122093-3  
MB ID: MR122093-3  
MS ID: B312154-07C  
MSD ID: B312154-08C  
REP ID: LCSD122093-3

Batch QC Results

MDL: \_\_\_\_\_ PQL: 1.0 mg/L

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0	mg/L	SAT	12/20/16:00
LCS % Rec	108	% Rec		
LCSD % Rec	108	% Rec		
LCS/LCSD RPD	0	% RPD		
MS % Rec	108	% Rec		
MSD % Rec	105	% Rec		
MS/MSD RPD	2.82	% RPD		
REP RPD	0	% RPD		

Comments: Was rerun 12/21 Set 2

B312154-03C - ND

LCS 111% Rec

LCSD 108% Rec

2.74% RPD

QC BATCH ID FOR WET CHEM - Test Code: TDS

PREPREP METHOD:

PREP METHOD:

ANALYSIS METHOD: TDS

BATCH DATE: 12/14/93

INSTRUMENT ID: A

SET (BATCH) #: 1

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

- 1 B312154-02C
- 2 03C
- 3 04C
- 4 05C
- 5 06C
- 6 09C
- 7 10C
- 8 B312151-02C
- 9 09C
- 10 04C
- 11 05C
- 12 06C
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

- LCS ID: <sup>LCS</sup> 121493-1
- LCSD ID: LCSD 121493-1
- MB ID: NA
- MS ID: NA
- MSD ID: NA
- REP ID: B312154 07C, 08C  
B312151 07C, 08C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 10 mg/L

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	NA	mg/L	JAM	12/14 9:30
LCS % Rec	100	% Rec		
LCSD % Rec	101	% Rec		
LCS/LCSD RPD	0.995	% RPD		
MS % Rec	NA	% Rec		
MSD % Rec	NA	% Rec		
MS/MSD RPD	NA	% RPD		
REP RPD	0.94 / 0.95 / 0.95	% RPD		

SAT  
12/14/93

Comments:

QC BATCH ID FOR WET CHEM - Test Code: <u>  COD  </u>
PREPREP METHOD:
PREP METHOD:
ANALYSIS METHOD: <u>  COD  </u>
BATCH DATE: <u>  12/28/93  </u>
INSTRUMENT ID: <u>  A  </u>
SET (BATCH) #: <u>  1  </u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

- 1 B312154-02C
- 2 D3C
- 3 D4C
- 4 D5C
- 5 D6C
- 6 MS D7CSAT
- 7 D8CSAT
- 8 D9C
- 9 10C
- 10 DUP 10C SAT
- 11 A
- 12
- 13
- 14
- 15
- 16 SAT
- 17
- 18
- 19
- 20

- LCS ID: LCS 122893-1
- LCSD ID: LCSP 122893-1
- MB ID: MB 122893-1
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312154-10C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 25 mg/L

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0	mg/L	SAT	12/28
LCS % Rec	106	% Rec		
LCSD % Rec	98.4	% Rec		
LCS/LCSD RPD	7.44	% RPD		
MS % Rec	91.2	% Rec		
MSD % Rec	86.4	% Rec		
MS/MSD RPD	5.41	% RPD		
REP RPD	0	% RPD		

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: TSS

PREPREP METHOD:

PREP METHOD:

ANALYSIS METHOD: TSS

BATCH DATE: 12/14/83

INSTRUMENT ID: A

SET (BATCH) #: 1

Work Orders/Fractions Associated With Batch

Lab Sample ID's

Batch QC ID's

1 B312154-02C  
2 03C  
3 04C  
4 05C  
5 06C  
6 DUP OF 6) 07C  
7 DUP OF 6) 08C  
8 - 09C  
9 10C

LCS ID: LC51214934  
LCSD ID: LC50121493-1  
MB ID: NA  
MS ID: 1  
MSD ID: 1  
REP ID: B312154-07C, 08C ✓  
B312151-07C, 08C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 10

10 B312151-02C  
11 09C  
12 03C  
13 04C  
14 05C  
15 06C  
16 DUP OF 6) 07C  
17 DUP OF 6) 08C  
18  
19  
20

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	NA	ms/L	JAM	12/14/83 9:00
LCS % Rec	88.3	% Rec		
LCSD % Rec	93.1	% Rec		
LCS/LCSD RPD	5.39	% RPD		
MS % Rec	NA	% Rec		
MSD % Rec	1	% Rec		
MS/MSD RPD	1	% RPD		
REP RPD		% RPD		

10.0/4.88

Comments: \*Were rerun 12/17

B312154 = 16 SAT 07C - 16 ms/L

08C 14 ms/L

LCS/LCSD RPD 14.0

LCS 115% Rec

LCSD 100% Rec

QC BATCH ID FOR GFAA/CVAA - Test Code: <u>AS-GF</u>	
PREPREP METHOD:	
PREP METHOD:	<u>23020</u>
ANALYSIS METHOD:	<u>7060</u>
BATCH DATE:	<u>12/19/93</u>
INSTRUMENT ID:	<u>D</u>
SET (BATCH) #:	<u>2</u>

**Work Orders/Fractions Associated With Batch**

**Lab Sample ID's**

**Batch QC ID's**

- 1 B311333-02B
- 2 B312154-02D
- 3 03D
- 4 04D
- 5 05D
- 6 06D
- 7 07D
- 8 08D
- 9 09D
- 10 10D
- 11 [scribble]
- 12 [scribble]
- 13 [scribble]
- 14 [scribble]
- 15 [scribble]
- 16 [scribble]
- 17 [scribble]
- 18 [scribble]
- 19 [scribble]
- 20 [scribble]

- LCS ID: LC520 121593-2
- LCSD ID: LC5020 121593-2
- MB ID: P320 121593-2
- MS ID: B312154 - 07D MS
- MSD ID: B312154 - 08D MSD
- REP ID: B312154 - 06D DUP

**Batch QC Results**

MDL: 0.010 PQL: 0.010

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	<u>&lt;0.010</u>	<u>MG/L</u>	<u>KMB</u>	<u>12/19/93 12:15</u>
LCS % Rec	<u>96.3</u>	<u>% Rec</u>		
LCSD % Rec	<u>91.5</u>	<u>% Rec</u>		
LCS/LCSD RPD	<u>5.11</u>	<u>% RPD</u>		
MS % Rec	<u>108</u>	<u>% Rec</u>		
MSD % Rec	<u>105</u>	<u>% Rec</u>		
MS/MSD RPD	<u>2.82</u>	<u>% RPD</u>		
REP RPD	<u>1.28</u>	<u>% RPD</u>	<u>↓</u>	<u>↓</u>

Comments:

Analytical Spike = 106%

QC BATCH ID FOR GFAA/CVAA - Test Code: <u>PB-GF</u>	
PREPREP METHOD:	
PREP METHOD:	<u>23020</u>
ANALYSIS METHOD:	<u>7421</u>
BATCH DATE:	<u>12/15/93</u>
INSTRUMENT ID:	<u>C</u>
SET (BATCH) #:	<u>2</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

1	<u>B311333-02B</u>
2	<u>B312154-02D</u>
3	<u>03D</u>
4	<u>04D</u>
5	<u>05D</u>
6	<u>06D</u>
7	<u>07D</u>
8	<u>08D</u>
9	<u>09D</u>
10	<u>10D</u>
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

Batch QC ID's

LCS ID: LC520 121593-2  
 LCSD ID: LC5020 121593-2  
 MB ID: P320 121593-2  
 MS ID: B312154-07D MS  
 MSD ID: B312154-08D MSD  
 REP ID: B312154-06D DUP

Batch QC Results

MDL: 0.0030 PQL: 0.00

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	<u>&lt;0.0030</u>	<u>MG/L</u>	<u>KMB</u>	<u>12/19/93 11:51</u>
LCS % Rec	<u>104</u>	<u>% Rec</u>		
LCSD % Rec	<u>105</u>	<u>% Rec</u>		
LCS/LCSD RPD	<u>0.957</u>	<u>% RPD</u>		
MS % Rec	<u>117</u>	<u>% Rec</u>		
MSD % Rec	<u>115</u>	<u>% Rec</u>		
MS/MSD RPD	<u>1.72</u>	<u>% RPD</u>		
REP RPD	<u>0.0</u>	<u>% RPD</u>		

Comments: Analytical Spike = 110%

175-173 12/16/93

MLA

QC BATCH ID FOR GFAA/CVAA - Test Code: _____
PREPREP METHOD: 1311
PREP METHOD:
ANALYSIS METHOD: 7470
BATCH DATE: 12/16/93
INSTRUMENT ID: A
SET (BATCH) #: 1(2)

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1 B312145-01C
- 2 ↓ dup 01C
- 3 B312064-03B
- 4 B312154-02D
- 5 ↑ 03D
- 6 04D
- 7 05D
- 8 06D
- 9 07D
- 10 08D
- 11 09D
- 12 ↓ 10D
- 13
- 14
- 15
- 16 ~~MLA 12/16~~
- 17
- 18
- 19
- 20

Batch QC ID's

- LCS ID: ICU 121693-1
- LCSD ID: CCV-1 ↓
- MB ID: ICB ↓
- MS ID: B312154-07D MS
- MSD ID: ↓ 08D MSD
- REP ID: ↓ 06D DUP

Batch QC Results

MDL: 0.020 PQL: 0.020

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	0.0	mg/L	MLA	12/16/93 22:00
LCS % Rec	96.5	% Rec	↓	↓
LCSD % Rec	102	% Rec	↓	↓
LCS/LCSD RPD	5.54	% RPD	↓	↓
MS % Rec	109	% Rec	↓	↓
MSD % Rec	111	% Rec	↓	↓
MS/MSD RPD	1.82	% RPD	↓	↓
REP RPD	0	% RPD	↓	↓

Comments:

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QC BATCH ID FOR WET CHEM - Test Code: <u>9066</u>	
PREPREP METHOD:	
PREP METHOD:	
ANALYSIS METHOD:	<u>9066</u>
BATCH DATE:	<u>12-21-93</u>
INSTRUMENT ID:	<u>A</u>
SET (BATCH) #:	<u>1</u>

Work Orders/Fractions Associated With Batch

Lab Sample ID's

- 1 B312154-02C
- 2 03C
- 3 04C
- 4 05C
- 5 06C
- 6 09C
- 7 10C
- 8 \_\_\_\_\_
- 9 \_\_\_\_\_
- 10 \_\_\_\_\_
- 11 \_\_\_\_\_
- 12 \_\_\_\_\_
- 13 \_\_\_\_\_
- 14 \_\_\_\_\_
- 15 \_\_\_\_\_
- 16 \_\_\_\_\_
- 17 \_\_\_\_\_
- 18 \_\_\_\_\_
- 19 \_\_\_\_\_
- 20 \_\_\_\_\_

Batch QC ID's

- LCS ID: LCS 122193-1
- LCSD ID: LCSD 122793-1
- MB ID: MB 122193-1
- MS ID: B312154-07C
- MSD ID: B312154-08C
- REP ID: B312154-10C

Batch QC Results

MDL: \_\_\_\_\_ PQL: 0.010

Sample ID	Result	Units	Analyst	Date/Time
Method Blk	<u>ND</u>	<u>mg/L</u>	<u>DM</u>	<u>1-6-94 17:02</u>
LCS % Rec	<u>93</u>	% Rec		
LCSD % Rec	<u>100</u>	% Rec		
LCS/LCSD RPD	<u>7.2</u>	% RPD		
MS % Rec	<u>78</u>	% Rec		
MSD % Rec	<u>88</u>	% Rec		
MS/MSD RPD	<u>12</u>	% RPD		
REP RPD	<u>0</u>	% RPD		

Comments:

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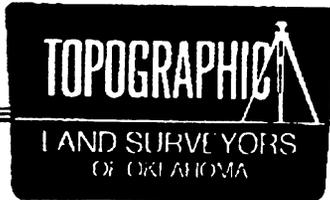
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**APPENDIX E  
SITE SURVEY REPORT**

Phone: (405) 843-4847  
WATS: (800) 854-3219  
FAX: (405) 843-0975



*Surveying and Mapping for Oklahoma's Energy Industry*

6709 N. Classen Blvd. Oklahoma City, Oklahoma 73116

International Technology Corporation  
Attn.: Joe Pacelli  
312 Directors Drive  
Knoxville, Tn 37923  
Reference: IT Subcontract No. 547295  
IDO-5001  
Bid 93116

*(Survey Contract)*

4.4 Documentation of Surveying Activities

**Survey Contractor:**

Topographic Land Surveyors of Oklahoma  
6709 N. Classen Blvd.  
Oklahoma City, Oklahoma 73116  
Edward D. (Deral ) Paulk, PLS  
President  
Harry McClintick, PLS  
Party Chief  
(405) 843-4847

**Instrumentation:**

Work done was completed with a Topcon/Sokkisha Model C3E. Last calibration by the factory was done 10/10/1993 and was checked daily by standard survey methods to determine that the tolerance was within factory limits. The unique serial number for the instrument is # 153047. The data collector was a Hewlett-Packard 48SX using the TDS Survey card.

**Methods:**

Standard mil-spec survey methods were employed during the survey and included.  
Double sets of repetitive angles, both in horizontal and vertical.  
Distance in Meters and Feet for double redundancy.

**Control Points:**

All control points used were set by the Corps of Engineers and the coordinates were supplied to us in NAD-83 Meters, Oklahoma North Zone (3501) based upon the Lambert projection. Typical numbers were;

BM SE (secondary control points)

BM PR (Primary control points)

These points were established by Trimble 4000SE GPS receivers and are capable of obtaining accuracy in the centimeter range. During our survey we confirmed this accuracy and due to the nature of GPS usage, we did not balance our traverse of the monumentation. See explanation beginning on page three, this document.

**Tabulation of Vertical and Horizontal Coordinates:**

In sheet form broken into per site information in three formats.

NAD-83 Meters

NAD-27 Feet

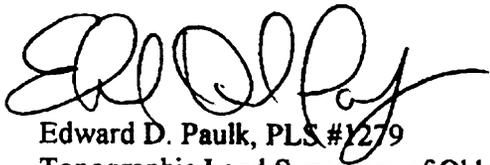
NAD-83 Feet

**Field Notes, Calculations and Reduction Techniques:**

All field work was performed using Total Station and no reduction was necessary. Grid and Sea level factors used in the calculations are attached as part of this report. No paper field notes were kept, except diagrams explaining shot points. These are included as drawings and are part of the digital information supplied.

Actual closure of each particular site is disclosed within this document beginning on page 4.

This survey is true and accurate based upon monumentation supplied by Tinker Air Force Base.



Edward D. Paulk, PLS #1279  
Topographic Land Surveyors of Oklahoma  
6709 N. Classen Blvd.  
Oklahoma City, Oklahoma 73116



## USAGE OF GPS MONUMENTATION

### **Qualifications:**

We are a Trimble Navigation dealer for the Midwest and have had crews surveying using GPS for over two years. Edward D. Paulk, has attended training and seminars continually to maintain a level of experience and technical knowledge of GPS that exceeds specs of GPS surveys.

During the course of our preliminary survey, we had closures that exceeded specs and we were forced to continue surveys back to our point of beginning to check our accuracy. We continually proved our surveys by closures exceeding 1 in 10,000, but we could not achieve this using the provided GPS monumentation and closing on a third monument.

We contacted the base mapping department and learned that the monuments were set using 4000SE receivers (GPS) by the Corps of Engineers. The 4000SE is capable of accuracy on any point of +/- 1-3 Centimeters. After this determination, we were well within specs of their given coordinates.

Their survey closure was probably quite good given the distances that they monumented, however when you use relatively close monuments as our survey dictated and very few traverse points, the error looks poor. Had we shot a mile away, then back to add some footage to our survey, the closure would have been much better. Since this technique is only used to comply with a pure mathematical closure, not a better survey, and would not actually improve positional accuracy, we did not do this.

## Site by Site Report

File HM-A

**HCL Tank**

*4 Soil Borings*

IT Drawing #409832 Fig. 5.5

Horizontal and Vertical Control was establish for (4) four Soil Borings.  
BM SE-33, SE-05 and PR-07 were used for control.

Upon first completion of traverse, we closed on PR-07 with 3.041' of error, but our vertical was with 0.05'. We made a closure back to SE-05 and closed within 0.4'. This site had the only apparent large discrepancy in their control. Since SE-33 and SE-05 agreed within limits we used these to determine closure.

Horizontal Accuracy 1 in 10,000

Vertical Accuracy 1 in 95,800

File HM-B

**SPILL POND**

*2 Soil Borings*

IT Drawing #409832 Fig. 5.6

Horizontal and Vertical Control was establish for (2) Soil Borings.  
BM SE-33, SE-37 and SE-42 were used for control.

Horizontal Accuracy 1 in 5902

Vertical Accuracy 1 in 12,000

We closed back upon our first monument horizontally 1 in 25,000 as a check.

File HM-C

**Sludge Drying Beds and Old Pesticide Area**

*13 Soil Borings*

*6 Monitor Wells*

*7 SG Points*

IT Drawing # 409832 Fig. 5.3 and 5.7

Horizontal and Vertical Control was established for (13) Soil Borings, (6) Six Monitor wells and (7) SG Points.

BM SE-41, SE-45 and SE-47 were used for control.

Horizontal Accuracy 1 in 8725

Vertical Accuracy 1 in 390,000

We closed back upon BM SE-45 as a check and closed 1 in 14,000 Horizontally.

**FileHM-D****Fuel Truck***(8) Soil Borings**(3) Monitor Wells**(3) SG Points*

IT Drawing #409832 Fig. 5.4

Horizontal and Vertical Control was established for (8) Soil Borings, (3) Monitor wells and (3) SG Points.

BM PR-02, SE-16 and PR-03 were used for control.

Horizontal Accuracy 1 in 22,586

Vertical Accuracy 1 in 20,000

**File HM-E****Ordinance Disposal Area***(5) Soil Borings**(4) Corners of area as per staked and Dan McGregor's instructions.*

IT Drawing #409832 Fig. 5.1

Horizontal and Vertical Control was established for (5) Soil Borings, (4) Corners of area.

BM SE-19, PR-02 and SE-016 were used for control.

Horizontal Accuracy 1 in 10,000

Vertical Accuracy 1 in 20,000

**File HM-F****Fire Training Area 2***(8) Monitor Wells*

IT Drawing #409832 Fig. 5.8

Horizontal and Vertical Control was established for (8) Monitor Wells.

BM SE-37, SE-33 and BM32 were used for control.

Horizontal Accuracy 1 in 34,800

Vertical Accuracy 1 in 95,000

**File HM-G****AFFF Fire Control Pond***(4) Soil Borings*

IT Drawing #409832 Fig. 5.2

Horizontal and Vertical Control was established for (4) Soil Borings.

BM SE-31, SE-22 and PR-01 were used for control.

Horizontal Accuracy 1 in 6500

Vertical Accuracy 1 in 58,000

### Shots Typical

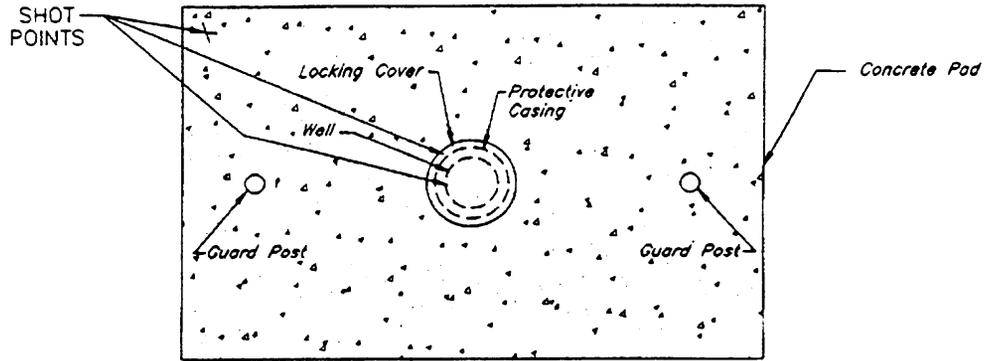
- Soil Borings-** One X,Y,Z placed center of drill hole, typically on top of concrete fill-in area.  
(36) Total Soil Borings
- Monitor Well-** (*Flush mount*) Three X,Y,Z,s were placed upon each well.  
1: NW Corner of concrete pad.  
2: Top of retaining casing, where well number was stamped into a milled area.  
3: Top of well, under seal, (X,Y determined for center, and Z determined at north lip of well.
- (*Tower Mount*) Three X,Y,Z,s were placed upon each well.  
1: NW Corner of concrete pad.  
2: Top of square guard, center  
3: Screw cap removed, X and Y in Center and Z on the North lip of well.  
(17) Total Monitoring wells. 51 points.

In addition; we determined X,Y and Z for a number of SG points. These were determined at center of dig point.

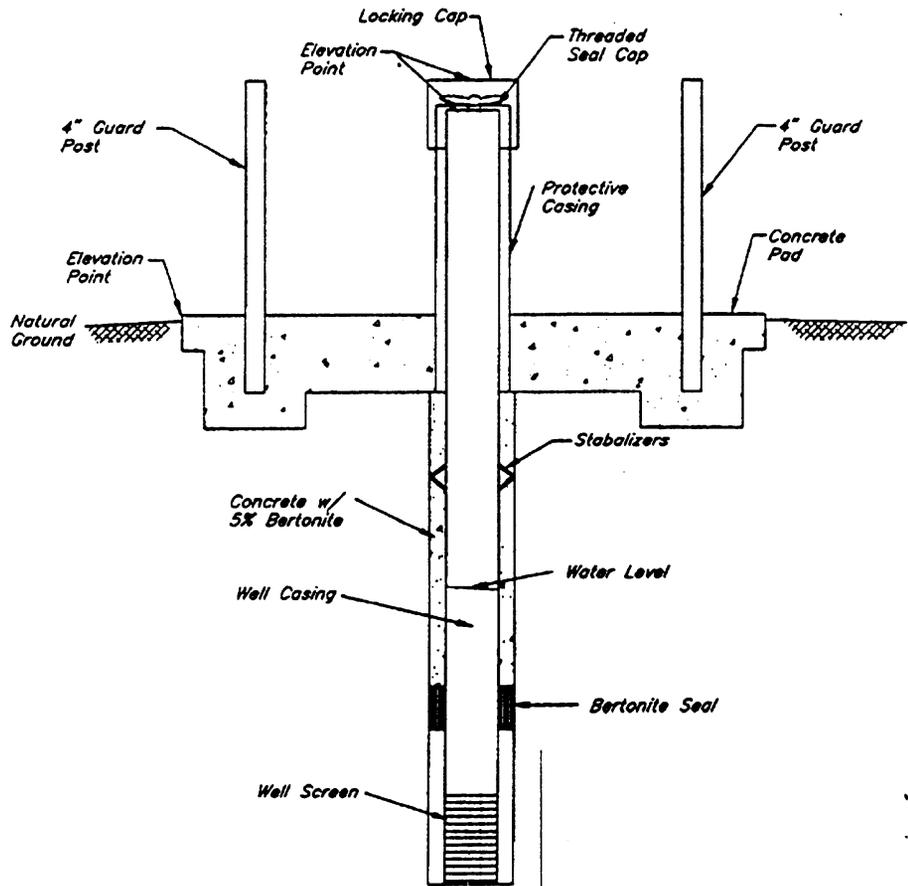
In addition; we determined X,Y and Z for four corners of an area in the **Ordinance Disposal** area as per Dan McGregor's instructions. These points were stakes set by previous contractor.

Included in this report are two drawings showing typical well layouts.

Drawing      Flush.Dwg  
                 Tower.Dwg

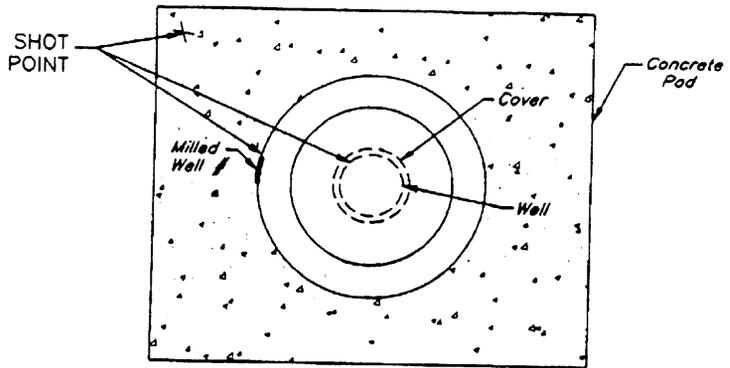


TOP VIEW

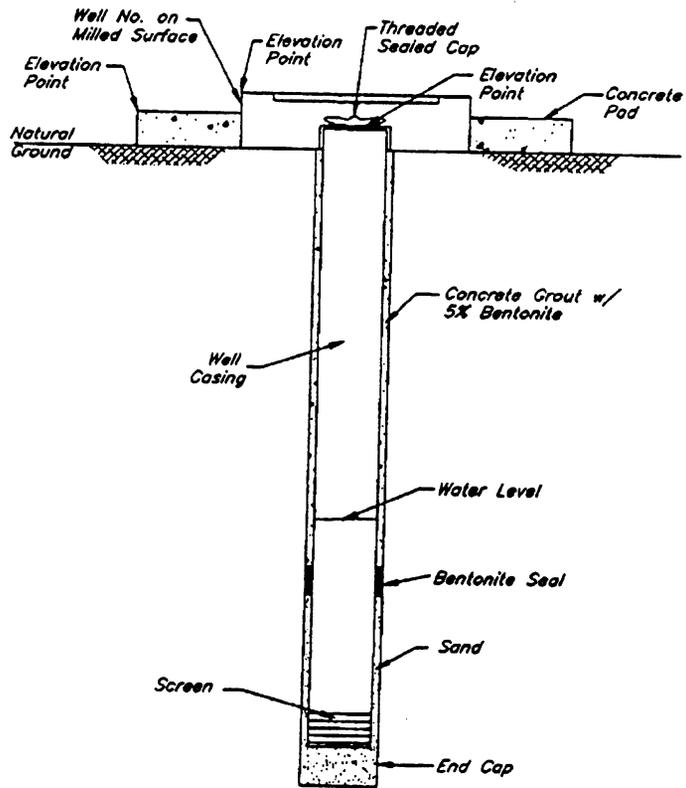


SIDE VIEW

				<b>TYPICAL STICK-UP MONITORING WELLS</b>		DATE: 1-19-94	
NO.	REVISION	DATE	BY	TOPOGRAPHIC LAND SURVEYORS OKLAHOMA CITY, OKLAHOMA		DRAWING: STICK-UP.DWG	
						SHEET OF	



TOP VIEW



SIDE VIEW

				<b>TYPICAL FLUSH MOUNT MONITORING WELLS</b>	DATE: 1-18-94
NO.	REVISION	DATE	BY		DRAWING: FLUSH DWG
				TOPOGRAPHIC LAND SURVEYORS OKLAHOMA CITY, OKLAHOMA	SHEET OF



**Diskette Files**Disk Labeled *IDO-5001*

#547295

Text Files and Final Reports

**FILE NAME****DESCRIPTION**

Report.WPS	Microsoft Works file of final report
Report.TXT	ASCII file of final report.
Finals.WB1	Quattro Pro for Windows data base All areas, control and Factors NAD-83, NAD-27
Finals.WK3	1-2-3 V.3.x database All areas, control and Factors
Hcl.TXT	ASCII of HCL Area
Spill.TXT	ASCII of Spill Pond
Sludge.TXT	ASCII of Sludge and Pesticide
Fuel.TXT	ASCII of Fuel Truck
Ordnance.TXT	ASCII of Ordnance area
Fire.TXT	ASCII of Fire Training
FireC.TXT	ASCII of Fire Control
NAD83.TXT	ASCII of X,Y,Z and Description
NAD27.TXT	ASCII of X,Y,Z and Description
Control.TXT	ASCII of X,Y,Z and Description of control monuments.
Factor.TXT	ASCII of grid/elevation factors used in calculations.

Nad 83 Datum		Format given was in meters				Nad 1927	
State Plane Lambert Coordinate System		Conversion used was					
Oklahoma North Zone		Meters X 3 280833337					
Values in Feet		Meters		Feet			
Control Coordinates from GPS		Northing	Easting	Northing	Easting		
GPS	Marker	Northing	Easting	Northing	Easting		
	Fire Training Center	365.81	459.50	1150.81	1507.90	1150.81	1507.90
	SE24	365.81	459.50	1150.81	1507.90	1150.81	1507.90
	SE28	377.86	456.04	1180.86	1485.04	1180.86	1485.04
	SE32	384.48	454.31	1204.48	1480.31	1204.48	1480.31
	SE43	378.07	483.03	1188.07	1518.03	1188.07	1518.03
	Bldg 1030 Staff Point	377.53	457.88	1187.53	1487.88	1187.53	1487.88
	SE42	371.68	462.96	1166.68	1512.96	1166.68	1512.96
	Bldg 970 AFFF	384.45	448.61	1244.45	1418.61	1244.45	1418.61
	SE22	384.45	448.61	1244.45	1418.61	1244.45	1418.61
	SE31	384.45	448.61	1244.45	1418.61	1244.45	1418.61
	PR01	392.74	443.81	1256.74	1413.81	1256.74	1413.81
	Sludge Drying Beds	374.76	486.93	1211.76	1511.93	1211.76	1511.93
	SE45	374.76	486.93	1211.76	1511.93	1211.76	1511.93
	SE47	371.68	471.17	1221.68	1483.17	1221.68	1483.17
	SE41	371.68	463.80	1221.68	1503.80	1221.68	1503.80
	HCL Tank	387.24	469.99	1254.24	1493.99	1254.24	1493.99
	SE05	387.24	469.99	1254.24	1493.99	1254.24	1493.99
	SE08	384.48	480.12	1244.48	1500.12	1244.48	1500.12
	PR07	387.24	476.40	1254.24	1493.40	1254.24	1493.40
	Ordinance Disposal	385.87	448.35	1250.87	1411.35	1250.87	1411.35
	SE16	385.87	448.35	1250.87	1411.35	1250.87	1411.35
	PR02	392.12	445.19	1270.12	1407.19	1270.12	1407.19
	SE15	384.48	448.74	1244.48	1418.74	1244.48	1418.74
	Fuel Truck Maint.	391.54	454.84	1268.54	1485.84	1268.54	1485.84
	SE10	391.54	454.84	1268.54	1485.84	1268.54	1485.84
	PR03	398.29	452.28	1290.29	1476.28	1290.29	1476.28
	Others	386.37	474.81	1266.37	1513.81	1266.37	1513.81
	SE03	386.37	474.81	1266.37	1513.81	1266.37	1513.81
	SE19	384.48	441.34	1244.48	1407.34	1244.48	1407.34
	SE33	384.16	455.72	1259.16	1418.72	1259.16	1418.72
	SE38	384.48	455.60	1259.48	1418.60	1259.48	1418.60
	SE36	387.24	457.26	1268.24	1413.26	1268.24	1413.26







Topographic	HM-C		Sludge and Pesticide		Conversion		3.28083337		NAD-83		Elevation
	Description	NAD-83 Foot	Easting	Northing	NAD-83 Meters	Easting	Northing	Easting	Northing	Easting	
SB-029	153312.251	2145687.276	1226.928	46729.667	654006.782	373.969	153285.911	2177284.758	1226.929		
SB-030	153346.842	2145683.882	1225.960	46740.210	654005.748	373.673	153320.501	2177281.365	1225.960		
SB-031	153365.289	2145684.283	1226.145	46745.833	654005.870	373.730	153338.949	2177281.766	1226.145		
SB-032	153366.845	2145704.893	1226.026	46746.307	654012.152	373.693	153340.504	2177302.376	1226.028		
SB-033	153369.982	2145725.373	1226.205	46747.263	654018.394	373.748	153343.640	2177322.855	1226.205		
SB-034	153367.428	2145750.652	1225.894	46746.485	654026.099	373.650	153341.086	2177348.133	1225.884		
NWCorPad	153327.504	2145660.862	1227.987	46734.316	653998.731	374.291	153301.184	2177258.344	1227.987		
BrassTag	153325.646	2145662.395	1228.252	46733.750	653999.199	374.372	153298.307	2177259.879	1228.252		
MW2-67A	153325.856	2145662.944	1227.860	46733.753	653999.366	374.259	153298.317	2177260.427	1227.880		
NWCorPad	153334.792	2145660.365	1227.942	46735.865	653998.580	374.277	153308.454	2177257.848	1227.942		
BrassTag	153332.586	2145662.743	1228.136	46736.025	653999.305	374.337	153306.246	2177260.227	1228.136		
MW2-67B	153333.109	2145662.460	1227.749	46724.193	653998.924	374.219	153308.771	2177259.941	1227.749		
SG-021	153284.259	2145681.494	1227.875	46788.391	653997.286	374.128	153267.920	2177258.977	1227.875		
SG-027	153504.913	2145656.153	1227.450	46782.389	654001.072	374.226	153478.575	2177253.637	1227.450		
NWCorPad	153485.156	2145668.540	1227.773	46781.608	654001.739	374.283	153458.818	2177266.025	1227.773		
BrassTag	153482.661	2145670.729	1227.992	46781.608	654001.739	374.283	153456.321	2177268.214	1227.992		
MW2-68A	153483.317	2145670.331	1227.639	46781.808	654001.618	374.185	153456.977	2177267.817	1227.639		
NWCorPad	153498.329	2145667.974	1227.737	46786.384	654000.899	374.215	153471.990	2177265.458	1227.737		
BrassTag	153497.345	2145669.894	1227.801	46786.084	654001.484	374.234	153471.006	2177267.371	1227.801		
MW2-68B	153496.783	2145670.021	1227.501	46785.913	654001.523	374.143	153470.445	2177267.505	1227.501		
SB-035	153513.044	2145686.160	1225.832	46790.869	654006.442	373.634	153488.704	2177283.644	1225.832		
SB-041	153461.953	2145572.501	1226.184	46775.296	653971.799	373.742	153435.613	2177169.968	1226.184		
SG-045	153403.851	2145548.281	1227.352	46757.587	653964.417	374.098	153377.514	2177145.766	1227.352		
SG-043	153478.151	2145547.779	1227.388	46780.233	653964.264	374.109	153451.811	2177145.265	1227.388		
SB-039	153436.514	2145600.936	1225.186	46767.542	653980.466	373.437	153410.174	2177198.420	1225.186		
SB-040	153422.287	2145576.593	1225.367	46763.206	653873.046	373.493	153395.948	2177174.077	1225.367		
SB-036	153520.297	2145579.088	1225.408	46783.080	654013.431	373.505	153493.958	2177306.573	1225.408		
SB-037	153515.849	2145723.059	1225.922	46791.724	654017.689	373.631	153489.509	2177320.543	1225.822		
SB-038	153515.734	2145749.026	1225.397	46791.689	654025.604	373.502	153489.384	2177346.511	1225.397		
SG-030	153587.989	2145651.621	1228.246	46813.712	653995.915	374.370	153561.849	2177249.107	1228.246		
SG-034	153561.346	2145780.604	1228.528	46805.591	654035.229	374.458	153535.004	2177378.089	1228.528		
SG-035	153529.622	2145780.692	1228.755	46795.922	654035.256	374.525	153503.281	2177378.177	1228.755		
NWCorPad	153503.822	2145892.455	1228.566	46788.058	654069.321	374.468	153477.479	2177489.938	1228.566		
BrassTag	153501.522	2145894.847	1228.786	46787.452	654070.050	374.535	153475.180	2177492.330	1228.786		
MW2-66B	153501.835	2145894.243	1228.424	46787.452	654069.866	374.424	153475.491	2177491.726	1228.424		
NWCorPad	153512.675	2145892.637	1228.458	46790.756	654069.377	374.435	153486.331	2177490.122	1228.458		
BrassTag	153511.424	2145894.290	1228.601	46790.375	654069.880	374.478	153485.081	2177491.772	1228.601		
MW2-66A	153510.700	2145894.300	1228.209	46790.154	654069.883	374.359	153484.356	2177491.782	1228.209		

Topographic Description	HM-D NAD-83 Feet		Fuel Truck		NAD-83 Meters		Elevation	
	Northing	Easting	Northing	Easting	Northing	Easting	Elevation	Elevation
NWCrop	148775.507	2155282.108	1295.444		45346.865	656931.293	394.852	2186878.522
TopCap	148773.603	2155283.795	1298.011		45346.284	656931.807	395.635	2186881.208
MW2-59	148773.597	2155283.829	1297.780		45346.283	656931.818	395.564	2186881.244
NWCrop	148680.914	2155133.601	1295.503		45318.033	656996.028	394.870	2186731.015
TopCap	148679.362	2155135.280	1297.910		45317.560	656996.540	395.604	2186732.695
MW2-61	148678.389	2155135.301	1297.669		45317.571	656996.546	395.530	2186732.714
SG-011	148684.532	2155080.720	1293.606		45319.135	656969.910	394.292	2186678.134
SG-007	148683.636	2155169.969	1294.398		45318.862	656897.113	394.533	2186767.393
SB-028	148708.492	2155153.422	1295.648		45328.439	656892.069	394.915	2186750.834
SB-026	148715.397	2155133.878	1295.280		45328.543	656898.112	394.802	2186731.291
SB-025	148744.572	2155125.634	1295.337		45337.436	656883.600	394.820	2186723.049
SB-024	148770.840	2155121.237	1295.452		45345.442	656882.259	394.855	2186718.650
SG-003	148773.567	2155152.471	1295.640		45346.273	656891.780	394.912	2186749.887
SB-021	148792.311	2155168.857	1295.340		45351.987	656896.774	394.820	2186766.271
SB-022	148790.269	2155108.589	1295.427		45351.364	656877.795	394.847	2186704.005
SB-027	148767.378	2155095.618	1295.804		45344.387	656874.451	394.962	2186693.033
NWCrop	148708.128	2155095.209	1295.822		45328.328	656874.326	394.967	2186692.623
Brasslag	148744.809	2155092.856	1295.791		45337.508	656873.609	394.958	2186690.271
MW2-60	148743.943	2155093.861	1295.890		45337.244	656873.854	394.988	2186691.074
	148743.299	2155093.599	1295.587		45337.048	656873.835	394.896	2186691.012
		Conversion	3.28083337					
		Factor						

Topographic	HM-E File	Ordinance	NAD-83 Feet			NAD-83 Meters			NAD-22			
Description	Northing	Easting	Elevation	Northing	Easting	Elevation	Northing	Easting	Elevation	Northing	Easting	Elevation
SB-014	146445.086	2154383.435	1311.061	44636.551	656657.377	399.612	146418.665	2185980.834	1311.061			
SB-013	146413.073	2154355.429	1310.171	44626.783	656648.841	399.341	146388.651	2185952.828	1310.171			
SB-011	146447.893	2154329.998	1310.433	44637.407	656641.089	399.421	146421.474	2185927.398	1310.433			
SB-012	146465.811	2154321.859	1310.473	44642.888	656638.639	399.433	146439.390	2185919.358	1310.473			
SB-010	146542.271	2154343.810	1311.318	44668.173	656645.299	399.691	146515.850	2185941.209	1311.318			
NWCorsite	146721.400	2154322.520	1309.813	44720.772	656638.810	399.232	146694.980	2185919.921	1309.813			
SWCORSite	146451.388	2154188.076	1308.511	44638.472	656597.831	398.835	146424.989	2185785.474	1308.511			
SECorsite	146305.859	2154478.943	1308.422	44594.115	656686.488	398.808	146279.439	2186076.341	1308.422			
NECORSite	146573.205	2154611.871	1306.203	44675.602	656727.004	398.131	146546.781	2186209.288	1306.203			
		Conversion	3.28083337									
		Factor										

Topographic Description	HM-F		Fire Training		NAD-83 Feet			NAD-27		
	Northing	Easting	Northing	Easting	Northing	Easting	Elevation	Northing	Easting	Elevation
NWCorPad	150498.212	2150362.314	150498.212	2150362.314	45872.251	655431.737	379.817	150472.828	2181959.759	1246.117
Brasstag	150496.710	2150361.243	150496.710	2150361.243	45871.488	655431.410	379.883	150470.323	2181958.686	1246.334
MW2-64A	150496.592	2150361.920	150496.592	2150361.920	45871.452	655431.617	379.797	150470.205	2181959.365	1246.052
NWCorPad	150498.378	2150370.497	150498.378	2150370.497	45871.387	655434.231	379.705	150468.991	2181967.941	1245.748
BrasT90	150494.048	2150369.766	150494.048	2150369.766	45870.677	655434.008	379.750	150467.682	2181987.209	1245.897
MW2-64B	150493.787	2150370.314	150493.787	2150370.314	45870.598	655434.175	379.655	150467.403	2181967.757	1245.586
NWCorPad	150413.765	2150435.848	150413.765	2150435.848	45846.207	655454.150	378.977	150387.390	2182033.291	1243.361
BRASSTAG	150412.971	2150437.446	150412.971	2150437.446	45845.965	655454.837	379.038	150386.585	2182034.899	1243.561
MW2-63B	150417.498	2150437.914	150417.498	2150437.914	45845.821	655454.780	378.954	150386.113	2182035.358	1243.284
NWCorPad	150416.999	2150445.608	150416.999	2150445.608	45847.339	655456.444	379.059	150391.093	2182040.817	1243.630
BRASSTAG	150416.351	2150445.576	150416.351	2150445.576	45847.192	655457.125	379.108	150390.611	2182043.052	1243.790
NWCorPad	150472.247	2150540.674	150472.247	2150540.674	45846.995	655486.101	378.985	150445.859	2182138.117	1246.052
BRASSTAG	150471.088	2150542.460	150471.088	2150542.460	45884.032	655486.845	379.863	150444.701	2182139.902	1246.266
MW2-62B	150475.671	2150552.588	150475.671	2150552.588	45885.076	655489.732	379.906	150444.517	2182140.558	1245.940
NWCorPad	150474.251	2150554.084	150474.251	2150554.084	45884.643	655490.188	379.943	150449.284	2182151.526	1246.409
BRASSTAG	150474.278	2150554.721	150474.278	2150554.721	45884.651	655490.383	379.846	150447.863	2182151.526	1246.531
MW2-62A	150726.091	2150590.145	150726.091	2150590.145	45941.404	655501.180	381.342	150699.702	2182167.591	1251.120
NWCorPad	150724.666	2150593.078	150724.666	2150593.078	45940.970	655502.074	381.388	150698.278	2182180.524	1251.270
BRASSTAG	150724.671	2150592.440	150724.671	2150592.440	45940.971	655501.879	381.298	150698.261	2182180.884	1250.876
MW2-65A	150740.546	2150583.419	150740.546	2150583.419	45945.810	655498.130	381.287	150714.157	2182180.865	1250.939
NWCorPad	150739.181	2150585.126	150739.181	2150585.126	45945.394	655498.650	381.333	150712.792	2182182.571	1251.089
BRASSTAG	150739.263	2150585.757	150739.263	2150585.757	45945.419	655498.842	381.248	150712.875	2182183.201	1250.812
MW2-65B		Conversion Factor		3.28083337						

Topographic	HMA-G File	Fire Control	NAD-83 Meters			NAD-27		
Description	Northing	Easting	Northing	Easting	Elevation	Northing	Easting	Elevation
SB-018	147211.133	2150886.702	44870.043	655.591.571	386.679	147184.752	2,182,484.119	1268.631
SB-017	147032.432	2150889.734	44815.574	655.592.485	387.207	147006.049	2,182,487.149	1270.361
SB-016	146809.976	2150890.028	44747.770	655.592.584	388.250	146783.596	2,182,487.440	1273.784
SB-015	146611.995	2150890.336	44687.425	655.592.678	388.912	146585.815	2,182,487.746	1275.957
			Conversion Factor			NAD-27 Derived		
			Meters X 3.28083337			Corpscon Prod		
			3.28083337					

Coordinates in NAD 27 (Feet)			
SB-046	153257.757	2185233.520	1275.110
SB-044	153812.059	2185218.954	1275.980
SB-042	154123.573	2185217.979	1276.230
SB-043	154419.041	2185201.941	1275.830
SB-019	150737.212	2179625.925	1227.435
SB-020	150755.821	2179609.357	1226.202
SB-029	153285.911	2177284.758	1226.929
SB-030	153320.501	2177281.365	1225.960
SB-031	153338.949	2177281.766	1226.145
SB-032	153340.504	2177302.376	1226.026
SB-033	153343.640	2177322.855	1226.205
SB-034	153341.088	2177348.133	1225.884
NWCorPad	153301.164	2177258.344	1227.987
BrassTag	153299.307	2177259.879	1228.252
MW2-67A	153299.317	2177260.427	1227.880
NWCorPad	153308.454	2177257.848	1227.942
BrassTag	153306.246	2177260.227	1228.136
MW2-67B	153306.771	2177259.941	1227.749
SG-021	153267.920	2177258.977	1227.875
SG-027	153478.575	2177253.637	1227.450
NWCorPad	153458.818	2177268.025	1227.773
BrassTag	153456.321	2177268.214	1227.992
MW2-68A	153456.977	2177267.817	1227.639
NWCorPad	153471.990	2177285.458	1227.737
BrassTag	153471.006	2177267.377	1227.801
MW2-68B	153470.445	2177267.505	1227.501
SB-035	153486.704	2177283.644	1225.832
SB-041	153435.613	2177169.986	1228.184
SG-046	153377.514	2177145.766	1227.352
SG-043	153451.811	2177145.265	1227.388
SB-039	153410.174	2177198.420	1225.186
SB-040	153395.948	2177174.077	1225.367
SB-036	153493.958	2177306.573	1225.408
SB-037	153489.509	2177320.543	1225.822
SB-038	153489.394	2177346.511	1225.397
SG-030	153561.649	2177249.107	1228.246
SG-034	153535.004	2177378.089	1228.528
SG-035	153503.281	2177378.177	1228.755
NWCorPad	153477.479	2177489.938	1228.566
BrassTag	153475.180	2177492.330	1228.786
MW2-66B	153475.481	2177491.728	1228.424
NWCorPad	153489.331	2177490.122	1228.458
BrassTag	153485.081	2177491.772	1228.601
MW2-66A	153484.358	2177491.782	1228.209
NWCorPad	148749.069	2186879.522	1295.444
TopCap	148747.163	2186881.208	1298.011
MW2-59	148747.160	2186881.244	1297.780
NWCorPad	148654.478	2186731.015	1295.503
TopCap	148652.828	2186732.695	1297.910
MW2-61	148652.962	2186732.714	1297.669
SG-011	148658.094	2186678.134	1293.606
SG-007	148657.198	2186767.383	1294.398
SB-026	148682.056	2186750.834	1295.649
SB-026	148688.959	2186731.291	1295.280
SB-025	148718.138	2186723.049	1295.337
SB-024	148744.402	2186718.650	1295.452
SB-023	148747.128	2186749.887	1295.640
SG-003	148765.875	2186766.271	1295.340
SB-021	148763.832	2186704.005	1295.427
SB-022	148740.941	2186693.033	1295.804
SB-027	148681.693	2186692.623	1295.822
NWCorPad	148718.373	2186690.271	1295.791
Brasstag	148717.508	2186691.074	1295.890
MW2-60	148716.863	2186691.012	1295.587
SB-014	146418.665	2185980.834	1311.061
SB-013	146386.651	2185952.828	1310.171
SB-011	146421.474	2185927.396	1310.433
SB-012	146439.390	2185919.358	1310.473
SB-010	146515.850	2185941.209	1311.318
NWCorSite	146694.980	2185919.921	1309.813
SWCorSite	146424.969	2185785.474	1308.511
SECorSite	146279.439	2186076.341	1308.422
NECorSite	146546.781	2186209.268	1306.203
NWCorPad	150472.826	2181959.759	1246.117

<b>Brasstag</b>	150470.323	2181958.686	1246.334
<b>MW2-64A</b>	150470.205	2181959.385	1246.052
<b>NWCorPad</b>	150489.991	2181967.941	1245.748
<b>BrasTag</b>	150467.662	2181967.209	1245.897
<b>MW2-64B</b>	150467.403	2181967.757	1245.586
<b>NWCORPAD</b>	150387.380	2182033.291	1243.361
<b>BRASSTAG</b>	150386.585	2182034.889	1243.561
<b>MW2-63B</b>	150386.113	2182035.358	1243.284
<b>NWCORPAD</b>	150391.093	2182040.817	1243.630
<b>BRASSTAG</b>	150390.611	2182043.052	1243.790
<b>MW2-63A</b>	150389.984	2182043.019	1243.387
<b>NWCORPAD</b>	150445.859	2182138.117	1246.052
<b>BRASSTAG</b>	150444.701	2182139.902	1246.266
<b>MW2-62B</b>	150444.517	2182140.558	1245.940
<b>NWCORPAD</b>	150449.284	2182150.03	1246.409
<b>BRASSTAG</b>	150447.883	2182151.526	1246.531
<b>MW2-62A</b>	150447.890	2182152.168	1246.213
<b>NWCORPAD</b>	150699.702	2182187.591	1251.120
<b>BRASSTAG</b>	150698.278	2182190.524	1251.270
<b>MW2-85A</b>	150698.281	2182189.884	1250.976
<b>NWCORPAD</b>	150714.157	2182180.865	1250.839
<b>BRASSTAG</b>	150712.792	2182182.571	1251.089
<b>MW2-65B</b>	150712.875	2182183.201	1250.812
<b>SB-018</b>	147184.752	2,182,484.119	1288.631
<b>SB-017</b>	147006.049	2,182,487.149	1270.361
<b>SB-016</b>	146783.596	2,182,487.440	1273.784
<b>SB-015</b>	146585.615	2,182,487.746	1276.957

NAO-27

Coordinates in NAD 83 (Meters)			
48721.114	656429.578		
48890.066	656425.137	388.654	SB-045
48985.016	656424.839	388.919	SB-044
47075.075	656419.950	388.996	SB-042
48962.828	654720.380	388.874	SB-043
48965.500	654715.330	374.123	SB-019
46729.667	654006.782	373.747	SB-020
46740.210	654005.748	373.969	SB-029
46745.833	654005.870	373.673	SB-030
46746.907	654012.152	373.730	SB-031
46747.263	654018.394	373.693	SB-032
46746.485	654026.099	373.748	SB-033
46734.318	653998.731	373.650	SB-034
46733.750	653999.189	374.291	NWCorPad
46733.753	653999.366	374.372	BrassTag
46736.538	653998.580	374.259	MW2-67A
46736.865	653999.305	374.277	NWCorPad
46736.025	653999.218	374.337	BrassTag
46724.183	653998.924	374.219	MW2-67B
46788.391	653997.296	374.257	SG-021
46782.389	654001.072	374.128	SG-027
46781.608	654001.739	374.226	NWCorPad
46781.808	654001.618	374.293	BrassTag
46786.384	654000.899	374.185	MW2-68A
46786.084	654001.484	374.215	NWCorPad
46786.913	654001.523	374.234	BrassTag
46790.869	654006.442	374.143	MW2-68B
46775.296	653971.799	373.834	SB-035
46767.587	653984.417	373.742	SB-041
46780.233	653964.264	374.098	SG-045
46767.542	653980.466	374.109	SG-043
46763.206	653973.046	373.437	SB-039
46793.080	654013.431	373.493	SB-040
46791.724	654017.889	373.505	SB-036
46791.689	654025.604	373.631	SB-037
46813.712	653995.915	373.602	SB-038
46805.591	654035.228	374.370	SG-030
46795.922	654035.256	374.456	SG-034
46785.058	654069.321	374.525	SG-035
46787.357	654070.050	374.468	NWCorPad
46787.452	654069.868	374.535	BrassTag
46790.786	654069.377	374.424	MW2-66B
46790.376	654069.880	374.435	NWCorPad
46790.154	654069.883	374.478	BrassTag
46346.886	656931.293	374.359	MW2-68A
46346.284	656931.807	394.852	NWCorPad
46346.283	656931.818	395.635	TopCap
46318.033	656886.028	395.564	MW2-59
46317.560	656886.540	394.870	NWCorPad
46317.571	656886.546	395.604	TopCap
46319.135	656889.910	395.530	MW2-61
46318.862	656897.113	394.292	SG-011
46328.439	656892.069	394.533	SG-007
46328.543	656886.112	394.915	SB-028
46337.436	656883.600	394.802	SB-026
46345.442	656882.259	394.820	SB-025
46346.273	656881.780	394.855	SB-024
46381.987	656896.774	394.912	SB-023
46381.364	656877.795	394.820	SG-003
46344.387	656874.451	394.847	SB-021
46326.328	656874.326	394.962	SB-022
46337.508	656873.609	394.967	SB-027
46337.244	656873.854	394.958	NWCorPad
46337.048	656873.835	394.988	Brasstag
44838.551	656857.377	394.898	MW2-60
44828.793	656848.841	399.612	SB-014
44837.407	656841.089	399.341	SB-013
44842.868	656838.639	399.421	SB-011
44866.173	656845.299	399.433	SB-012
44720.772	656838.810	399.691	SB-010
44638.472	656597.831	399.232	NWCorSite
44694.115	656886.488	398.835	SWCorSite
44678.802	656727.004	398.808	SECorSite
45872.251	655431.737	398.131	NECorSite
		379.817	NWCorPad

45871.488	655431.410	379.883	Brasstag
45871.452	655431.617	379.797	MW2-64A
45871.387	655434.231	379.705	NWCorPad
45870.677	655434.008	379.750	Brasstag
45870.598	655434.175	379.655	MW2-64B
45845.207	655454.150	378.977	NWCORPAD
45845.965	655454.637	379.038	BRASSTAG
45845.821	655454.780	378.954	MW2-63B
45847.339	655458.444	379.059	NWCORPAD
45847.192	655457.125	379.108	BRASSTAG
45846.995	655457.115	378.985	MW2-63A
45864.032	655486.101	379.797	NWCORPAD
45863.679	655486.645	379.863	BRASSTAG
45863.623	655486.845	379.763	MW2-62B
45865.076	655489.732	379.906	NWCORPAD
45864.643	655490.188	379.943	BRASSTAG
45864.661	655490.383	379.846	MW2-62A
45941.404	655501.180	381.342	NWCORPAD
45940.970	655502.074	381.388	BRASSTAG
45940.971	655501.879	381.298	MW2-65A
45945.810	655499.130	381.287	NWCORPAD
45945.394	655499.650	381.333	BRASSTAG
45945.419	655499.842	381.248	MW2-65B
44870.043	655591.571	386.679	SB-018
44815.874	655592.495	387.207	SB-017
44747.770	655592.584	388.250	SB-016
44687.425	655592.678	388.912	SB-015

NAD-83

**APPENDIX F  
GEOTECHNICAL, CERTIFICATES OF ANALYSIS,  
CHAIN-OF-CUSTODY**

CERTIFICATE OF ANALYSIS

Karmen Deane  
IT Corporation  
5307 Industrial Oaks Blvd.  
Suite 160  
Austin, TX 78735

March 16, 1994

ETDC Project Number: 483500.094.02 P.O. Number: 4627-341  
Job Number: 4I4627

This is the Certificate of Analysis for the following samples:

Client Project ID: Tinker AFB  
Date Received by Lab: November 10, 1993  
Number of Samples: Two (2)  
Sample Type: Soil

I. Introduction/Case Narrative

Two (2) soil samples were received by IT/ETDC on (November 11, 1993) for analyses of grain size distribution, cation exchange capacity, moisture content and permeability. Not all samples required all parameters.

Please see Appendix A, the Sample Number Cross Reference List; Appendix B, the Analysis Results; Appendix C, the Chain of Custody and Request for Analysis Records.

Reviewed and Approved:

  
Beverly L. Leamon  
Project Manager, Geotechnical Services

II. Analytical Results/Methodology

Routel to C.F., J.,  
3/21/94

REFERENCES: Annual Book of ASTM Standards, Section 4,  
Construction, Volume 04.08, Soil and Rock; Dimension Stone;  
Geosynthetics. Volume 4.02, Concrete and Aggregates.

Grain Size Distribution	ASTM D422
Cation Exchange Capacity	EPA, Method 9081
Moisture Content	ASTM D 2216
Permeability	ASTM D 5084

III. Quality Control

Except for cation exchange capacity analysis, quality control checks such as duplicates and spikes (QC samples), are not normally applicable to geotechnical testing. This is due to the inability of obtaining samples with known characteristics, the heterogenous nature of the samples, and Quality Control procedures built-in to the analytical method.

QC measures to ensure accuracy and precision of test results include the following:

- 100% verification on all numerical results - all raw data entries, transcriptions and calculations entered by lab technicians are checked, recalculated and verified. Most data calculations are performed by computer programs.
- Data validation through test reasonableness - summaries of all test results for individual reports are reviewed to determine the overall reasonableness of data and to determine the presence of any data that may be considered outliers.
- Quality control procedures are built into most standardized geotechnical procedures. For example, many analyses routinely call for a re-analysis, specifying an acceptance criteria.
- Routine instrument calibration - all instruments, gauges and equipment used in testing are calibrated on a routine basis. All instrument calibration follows ASTM or manufacturer guidelines.
- Maintenance of all past calibration records - records and certification documents of all instruments, gauges and equipment are updated routinely and maintained in the Quality Control Coordinators Quality/Operations files.

Routed to CFIT  
3/21/94

- Use of trained personnel for conducting tests - all technicians are trained in the application of standard laboratory procedures for geotechnical analyses as well as the quality assurance measures implemented by IT.

#### IV. Data Qualification

Fine sieve and hydrometer results occasionally overlap due to organic debris, soluble salts or other contaminants contained in the sample. Data points are plotted as calculated. No attempt has been made to curve-fit the grainsize data points.

The cation exchange procedure included analysis of a blank, duplicate and a matrix spike. The blank value was found to be near the method detection limit of 0.05 mg/l for sodium analysis. The relative percent difference for the duplicate sample was 2.1%. The matrix spike recovery was 73 %.

Moisture contents are calculated in accordance with ASTM D 2216. Given results are based on the sample dry weight, not on the sample wet weight as is common in analytical chemistry.

## Appendix A

Page 4 of 9  
Karmen Deane  
IT Corporation  
March 16, 1994  
Client Project ID: TINKER AFB  
ETDC Project No.: 483500.094.02

IT ENVIRONMENTAL TECHNOLOGY  
DEVELOPMENT CENTER  
OAK RIDGE, TN  
(615) 482-6497

ROUTED TO JETL/KF  
3/18/94

CROSS-REFERENCE LIST

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ETDC SAMPLE NO.	CLIENT SAMPLE NO.
ETDC-4551.....	B311077-06A
ETDC-4552.....	B311077-06B

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## Appendix B

Page 5 of 9  
 Karmen Deane  
 IT Corporation  
 March 16, 1994  
 Client Project ID: TINKER AFB  
 ETDC Project No.: 483500.094.02

IT ENVIRONMENTAL TECHNOLOGY  
 DEVELOPMENT CENTER  
 OAK RIDGE, TN  
 (615) 482-6497

**PARTICLE SIZE ANALYSIS**  
**ASTM D 422**

*Routed to (E.T.) K-  
 3/21/94*

Project Name: TINKER AFB  
 Project Number: 483500.094.01

Client No. B311077-06A  
 ETDC No. ETDC-4551

Specific Gravity 2.6500  
 Assumed

Moisture Content = NA

**SIEVE ANALYSIS**

C O A R S E	Sieve No.	Diameter mm	Percent Finer
	3"	75.000	100.0%
	1.5"	37.500	100.0%
	0.75"	19.000	100.0%
	0.375"	9.500	100.0%
	#4	4.750	100.0%
	#10	2.000	100.0%

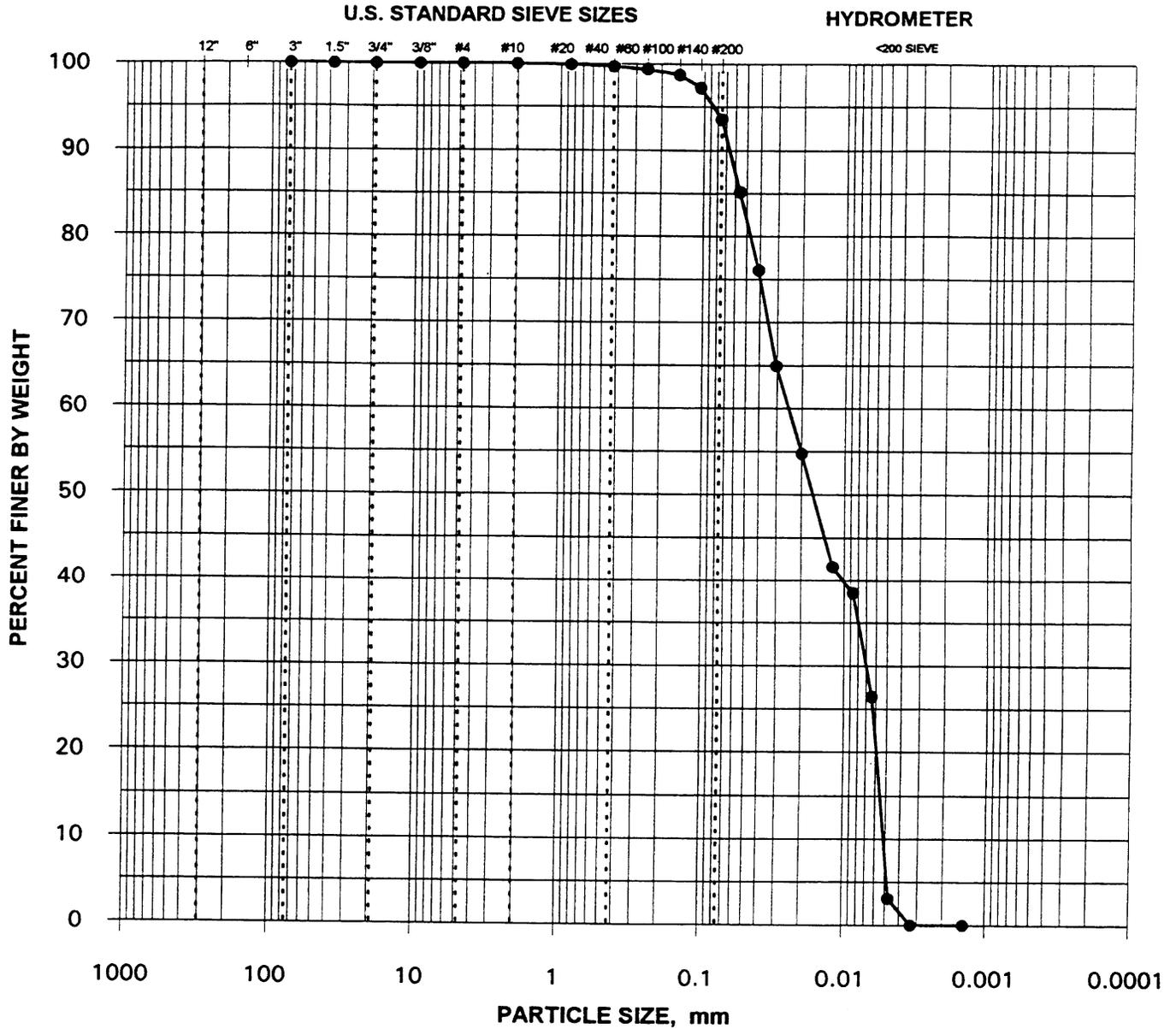
F I N E	Sieve No.	Diameter mm	Percent Finer
	#20	0.850	99.9%
	#40	0.425	99.7%
	#60	0.250	99.3%
	#100	0.149	98.8%
	#140	0.106	97.2%
	#200	0.075	93.6%

**HYDROMETER ANALYSIS**

H Y D R O M E T E R	Diameter mm	Percent Finer
	0.05561	85.2%
	0.04095	76.0%
	0.03037	64.9%
	0.01997	54.7%
	0.01211	41.6%
	0.00863	38.5%
	0.00635	26.4%
	0.00475	3.0%
	0.00328	0.0%
0.00142	0.0%	

*Routed to CFI 3/22/94*

# TINKER AFB



CLIENT SAMPLE NO.

B311077-06A

ETDC SAMPLE NO. ETDC-4551

BOULDERS	COBBLES	GRAVEL		SAND			SILT 2 - 75 microns CLAY <2 microns
		COARSE	FINE	COARSE	MEDIUM	FINE	





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Karmen Deane  
IT Corporation  
March 16, 1994  
Client Project ID: TINKER AFB  
ETDC Project No.: 483500.094.02

IT ENVIRONMENTAL TECHNOLOGY  
DEVELOPMENT CENTER  
OAK RIDGE, TN  
(615) 482-6497

PERMEABILITY RESULTS

ETDC SAMPLE NO.	CLIENT SAMPLE NO.	LENGTH/ DIAMETER/ WEIGHT	COEFF. OF PERMEABILITY
ETDC-4552	B311077-06B	10.407 cm/ 3.567 cm/ 219.50 grams	4.5 E-8 cm/s
ETDC-4554	B311067-04B	6.458 cm/ 3.523 cm/ 124.32 grams	2.3 E-6 cm/s

## Appendix C

